# YALE & TOWNE

## CHAIN BLOCKS
## ELECTRIC HOISTS
## TROLLEYS
## AND
## CRANES

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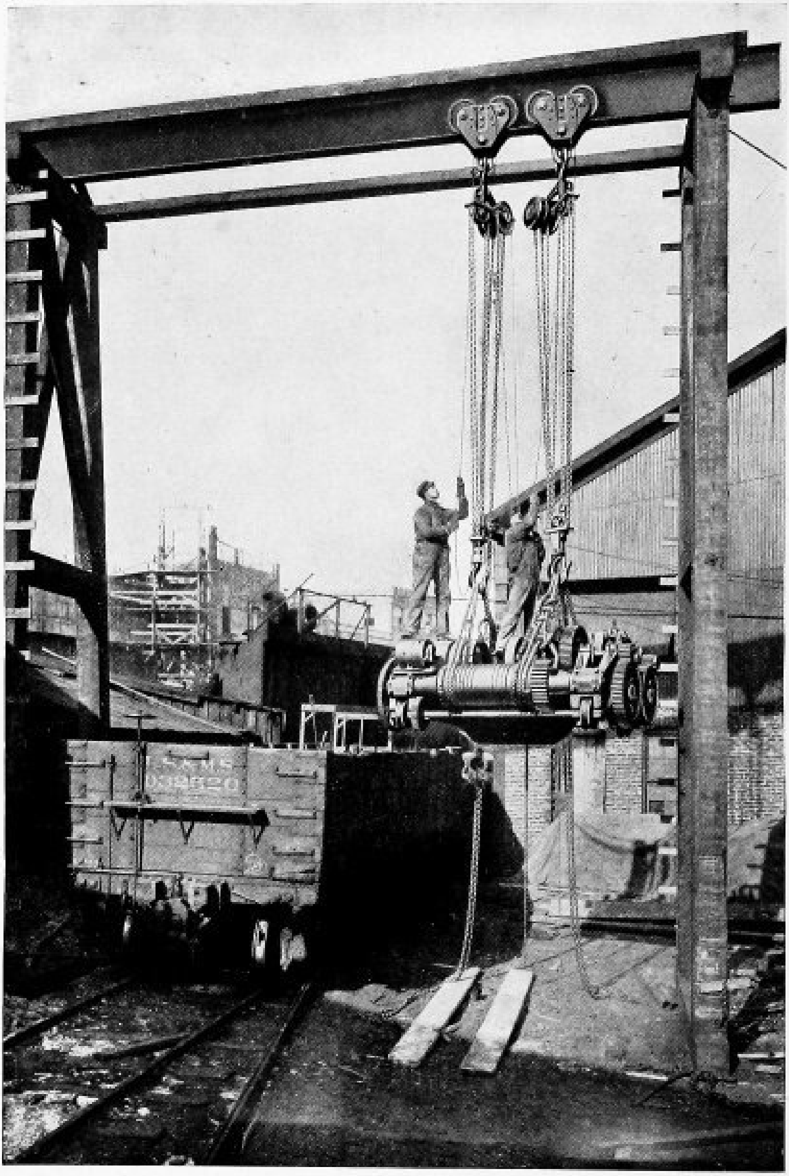
## Number of Standard Sizes Manufactured

| | |
|---|---|
| The Triplex Block . | 14 sizes |
| The Duplex Block . | 10 " |
| The Differential Block | 7 " |
| The Electric Hoists . | 10 " |
| Brown Trolleys . . | 14 " |
| Bracket Jib Cranes . | 9 " |
| Light Traveling Cranes | 6 " |
| Overhead Carrying Track | 10 " |

For Table of Contents, see page 4.

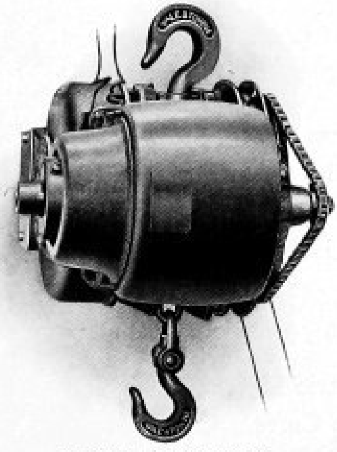


Triplex Blocks and Brown Steel Trolleys running on a steel I-beam.
The handy rig for temporary work.
See page 27.

## Yale & Towne

# Chain Blocks

Electric Hoists, Trolleys and Cranes



The *Electric* Triplex Block

**Triplex,** the best *hand* hoist; greatest ease, safety and speed.

**Duplex,** for ease and handiness.

**Differential,** the cheapest reliable chain block.

**Y. & T. Electric and Electric Triplex,** the best *power* hoists for rapid work.

1978

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The Yale & Towne Mfg. Co.
D9058-8-09-200

# Yale & Towne Chain Blocks and Electric Hoists

HOISTING devices are as old as civilization, but it was not until Thomas A. Weston, in 1854, invented the differential pulley block that the world had a portable hoist which was at once powerful, safe, convenient and cheap. Utilizing the principle of the Chinese windlass, but substituting an endless chain for its rope and iron sheaves for its wooden drum, Mr. Weston produced the first "chain block," a new "mechanical power," which enabled heavy loads to be lifted with little effort (although at slow speed) and which possessed the unique feature of always holding the load self-sustained. As an outcome of Mr. Weston's invention there was developed, some twenty years later, the screw-geared type of chain block, which possesses advantages for certain uses.

A further, and probably the final, step was taken, also by Mr. Weston, when, about 1889, he invented the Triplex block, whereby the lifting power of a man, in using a chain block, was increased nearly threefold, and his efficiency still more.

The Yale & Towne Mfg. Co. have always been the sole licensees under Mr. Weston's American patents. The present line of chain blocks embraces three types, each best for certain purposes, which collectively cover the entire field of practicable hand hoisting devices, viz.:

**The Triplex Chain Block: Spur-Geared.** In this, power is transmitted from the hand-chain to the load-chain by a train of spur-gears, thus giving the highest mechanical efficiency with the lowest frictional resistance and loss. The functions of hoisting and of lowering are separated, the latter being effected by an automatic brake mechanism, simple, sensitive and absolutely safe. See pages 10 and 11.

**The Duplex Chain Block: Screwed-Geared.** In this, power is transmitted from the hand-chain to the load-chain through a worm-wheel and screw, which, although necessarily involving higher frictional resistance, and therefore lower efficiency, than spur-gearing, has the advantage of lower first cost and of very smooth action both in hoisting and lowering. This block, while inferior, as a labor and money saver, to the Triplex, is preferred for some uses and has a well-defined field. See pages 16 and 17.

**The Differential Pulley Block.** In this, the power is applied by pulling directly on the slack part of the load-chain and is multiplied by the simple device of the "differential sheave." As compared either with the Triplex or Duplex Block it is a crude machine, wasteful of time and power, but by reason of its cheapness, simplicity and absolute safety it is, nevertheless, a useful hoist, where economy of time and labor is unimportant and low first cost the chief requirement. See pages 20 and 21.

**Mechanical Efficiency** is the percentage of applied power which is returned in useful work, and therefore is a fair measure of the relative economy of the three types of chain blocks. It is indicated by the following table, which shows approximately also their relative first costs (on the basis of the two-ton size) and their relative durability or life (as indicated by their frictional resistances and frequency of repair).

Comparative Table

| | Differential | Duplex | Triplex |
|---|---|---|---|
| Relative efficiency ............ | 35 | 50 | 100 |
| Relative durability ........... | 20 | 80 | 100 |
| Relative cost ................. | 40 | 80 | 100 |
| Relative economic value ...... | 20 | 60 | 100 |

The choice of type, therefore, turns on the question of whether the controlling factor is *low first cost* (without regard to ultimate economy) or *low operating cost* (measured in time or wages and in the life of the block). Where the use is frequent the entire first cost of the Triplex Block will usually be repaid within *one year*, or less, by the great saving in time and wages which it will effect.

Each type has its proper uses and special field; intelligent investigation will determine the type to be preferred in any given case. Each of the three blocks, Triplex, Duplex and Differential, is distinctly the *best of its type*, designed, made and tested with the greatest care and best facilities, aided by the accumulated experience of the largest makers of chain blocks in the world, but the highest and best is the Triplex.

**The Yale & Towne Electric Hoist.** The Chain Block of every type is a hand-operated machine. The advent of electricity has made possible a power-operated machine which is preferable to the Chain Block for many purposes. Necessarily it involves much higher first cost, but this is offset by an equal or greater decrease in operating cost, that is, in the saving of time and wages. Wherever electric current is available and economy of time important, the Electric Hoist should be considered, and frequently will be found to be the most economical machine to purchase.

While the increasing struggle for high efficiency and close economy in shop administration undoubtedly will lead to the increasing installation of ELECTRIC HOISTS for many uses, the CHAIN BLOCK will find an ever increasing field for the enlargement of its beneficent work of enabling man, by moderate muscular effort, to handle safely and quickly heavy loads. Each has its legitimate sphere of usefulness, and each constitutes an important and permanent part in the equipment of the modern industrial plant.

# Chain Block Hoisting Speeds and Specifications

| Capacity in Tons | PULL in Pounds required on Hand Chain to Lift Full Loads | | | Feet of Hand Chain to be Pulled by operator to Lift Load One Foot High | | | HOISTING SPEEDS. Feet per Minute Attainable and No. of Men required for Hoisting Full Loads without pulling over 80 Lbs. | | | | | | | | LOAD ONE MAN CAN HANDLE without pulling over 80 Lbs. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Triplex | | | | Duplex | | Differential | | | | |
| | Triplex | Duplex | Differential | Triplex | Duplex | Differential | Full Load | Half Load | Quarter Load | No.† of Men | Full Load | No.† of Men | Full Load | No.† of Men | Triplex | Duplex | Differential |
| ¼ | . | . | 72 | . | . | 18 | . . . | . . . | . . . | . . . | . . . | . . . | 6. | 1 | . . . | . . . | 500 |
| ½ | 62 | 68 | 122 | 21 | 40 | 24 | 8. | 16. | 24. | 1 | 4. | 1 | 6. | 2 | 1000 | 1000 | 600 |
| 1 | 82 | 87 | 216 | 31 | 59 | 30 | 4. | 8. | 12. | 1 | 2. | 1 | 3.70 | 3 | 2000 | 1700 | 800 |
| 1½ | 110 | 94 | 246 | 35 | 80 | 36 | 4.8 | 9.6 | 14.4 | 2 | 2.40 | 2 | 2.50 | 3 | 2300 | 2500 | 1000 |
| 2 | 120 | 115 | 308 | 42 | 93 | 42 | 3.6 | 7.2 | 10.8 | 2 | 1.80 | 2 | 2.30 | 4 | 2600 | 2700 | 1100 |
| 3 | 114 | 132 | 557 | 69 | 126 | 38 | 2.3 | 4.6 | 6.9 | 2 | 1.10 | 2 | 2.30 | 7 | 4000 | 3300 | 1000 |
| 4 | 124 | 142 | . . . | 84 | 155 | . . . | 1.7 | 3.5 | 5.2 | 2 | .80 | 2 | . . . | . . . | 5000 | 4600 | . . . |
| 5 | 110 | 145 | . . . | 126 | 195 | . . . | 1.3 | 2.6 | 3.9 | 2 | .65 | 2 | . . . | . . . | 6500 | 5300 | . . . |
| 6 | 130 | 145 | . . . | 126 | 252 | . . . | 1.1 | 2.2 | 3.3 | 2 | .50 | 2 | . . . | . . . | 7000 | 6500 | . . . |
| 8 | 135 | 160 | . . . | 168 | 310 | . . . | .8 | 1.6 | 2.4 | 2 | .35 | 2 | . . . | . . . | 9000 | 7800 | . . . |
| 10 | 140 | 160 | . . . | 210 | 390 | . . . | .6 | 1.2 | 1.8 | 2 | .30 | 2 | . . . | . . . | 11000 | 10000 | . . . |
| 12 | 130* | . . . | . . . | 126* | . . . | . . . | 1.1 | 2.2 | 3.3 | 4 | . . . | . . . | . . . | . . . | 13000 | . . . | . . . |
| 16 | 135* | . . . | . . . | 168* | . . . | . . . | .8 | 1.6 | 2.4 | 4 | . . . | . . . | . . . | . . . | 17000 | . . . | . . . |
| 20 | 140* | . . . | . . . | 210* | . . . | . . . | .6 | 1.2 | 1.8 | 4 | . . . | . . . | . . . | . . . | 20000 | . . . | . . . |

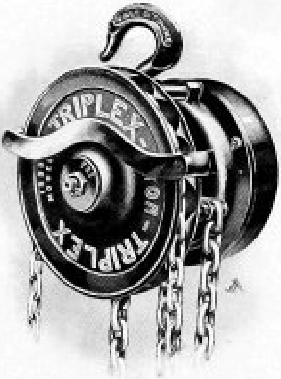
* On each of the two hand chains.

† The number of men is based on each man pulling not over 80 lbs. One man pulling 160 lbs. or less, as given in the first two columns can lift the full capacity of any Triplex or Duplex Block.

The speed of a chain block is governed by the pull required on the hand chain and the distance the hand chain must travel to lift the load the required distance.

The above speeds are given for short lifts with men accustomed to the work ; for continuous easy lifting two-thirds of these speeds are attainable. The Triplex Block lifts rapidly, and the speed increases for light loads because the length of hand chain to be overhauled is small. This fact also enables the operator to lower the load very quickly with the Triplex Block. The 12 to 20 ton Triplex Blocks are provided with two separate hand wheels, thus permitting two men to hoist simultaneously, thereby securing double speed.

# Chain Blocks



The Triplex Block

Three kinds and 20 sizes for every hoisting need.

The Triplex for speed.

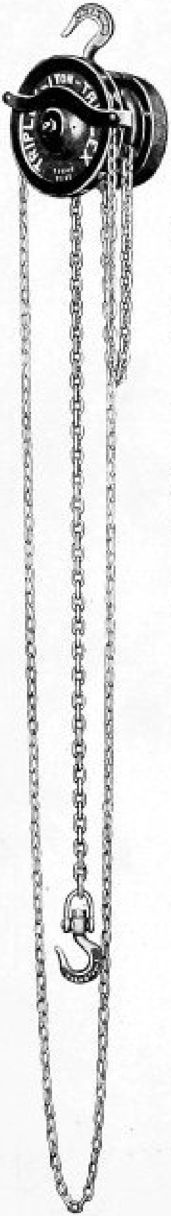
The Duplex for handiness, and

The Differential is the cheapest reliable chain block.

# Yale & Towne
# Triplex Block

Patented

## Spur-Geared

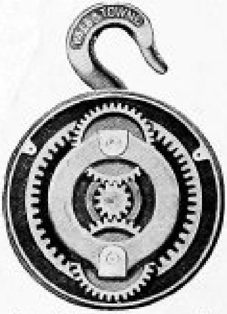


THE TRIPLEX BLOCK will outlift and outlast any other block in points of *economy*, *ease* and *safety*. It cannot be equaled as a hoist on hand cranes from ½ to 20 tons capacity, and on jibs and overhead carrier systems it will repay its costs several times each year.

It saves and utilizes the power which in blocks of other kinds is wasted in overcoming the friction relied on to sustain the load. Previous to this invention no block existed in which the sustaining mechanism did not augment the resistance to be overcome in hoisting. This is saved by separating the *sustaining* mechanism from the *hoisting* mechanism.

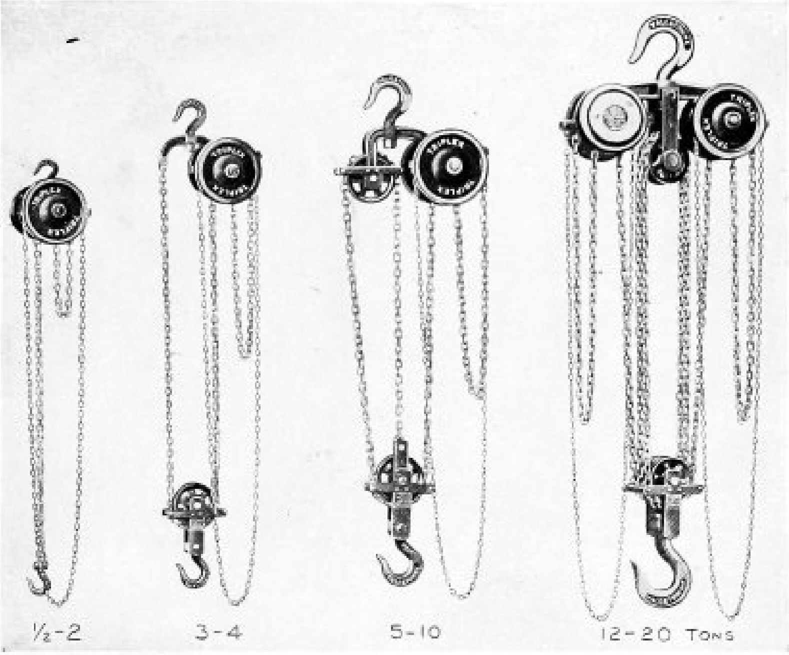
Each hour's work required with other blocks can be done with the Triplex Block in 30 minutes.

Let us send you a TRIPLEX Block to try in actual work. If it does not suit, you may return it and we pay the freight.



Cut steel intermediate gears with large pinions and large internal gear giving low pressures on the teeth and liberal wearing surfaces.

A Quick-speed Triplex Block, specially geared, is made in two sizes (¼ Ton at $35.00 and 1 Ton at $45.00), suitable for rapid work in frequent lifting of loads weighing less than five hundred pounds. It handles light loads at double speed, but requires double the chain pull. For easy lifting the *regular* Triplex Blocks are faster than any others, considering the force which a man can exert continuously on the hand chain.

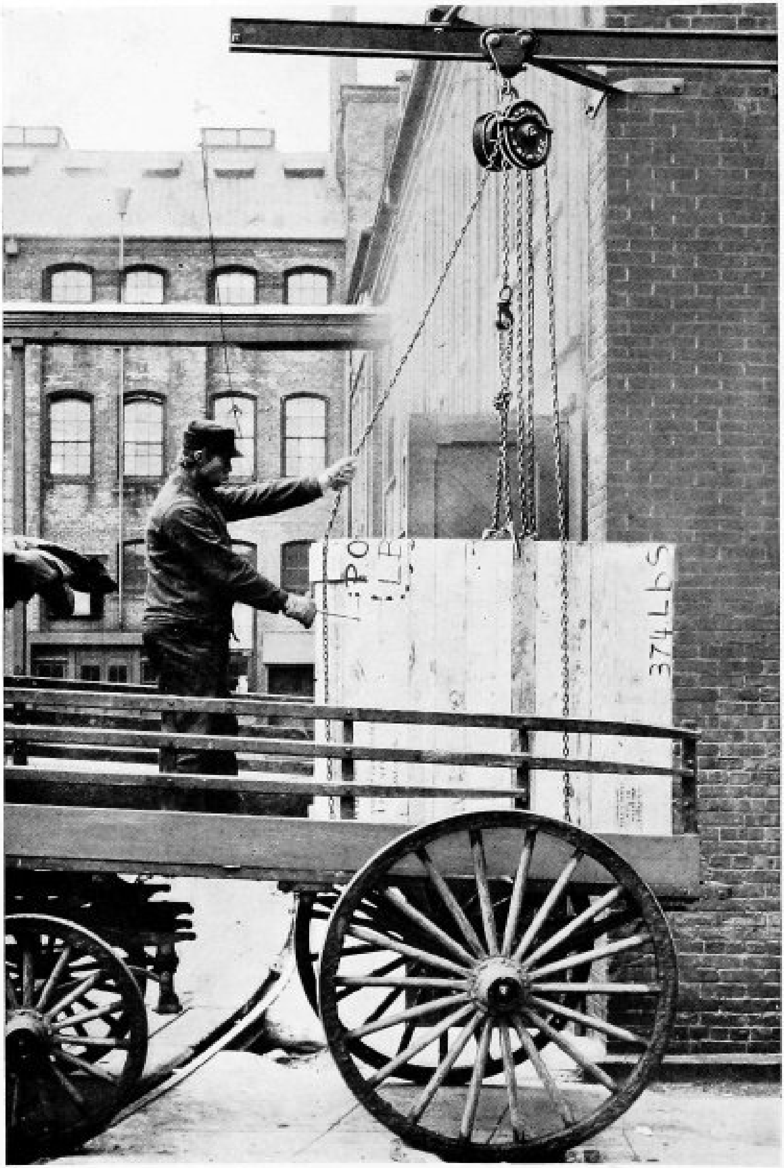


## Yale & Towne Triplex Blocks, ½ to 20 Tons.

| Capacity in Tons | Price Complete | Regular Hoist in Feet * | Reach in Feet and Inches | Extra Hoist Price per foot | Minimum Distance between Hooks, in Inches | Net Weight in Lbs. | Chain Pull in Lbs. to lift Full Load | Feet of Chain Handled to lift load one Foot | Telegraphic Code Word |
|---|---|---|---|---|---|---|---|---|---|
| ½ | $ 35.00 | 8 | 9'-3" | $ .90 | 15 | 53 | 62 | 21 | Baadster |
| 1 | 45.00 | 8 | 9'-5" | .95 | 17 | 80 | 82 | 31 | Baalbek |
| 1½ | 60.00 | 8 | 9'-7½" | 1.00 | 19½ | 124 | 110 | 35 | Baaldoek |
| 2 | 70.00 | 9 | 11'-0" | 1.05 | 24 | 188 | 120 | 42 | Baalism |
| 3 | 90.00 | 10 | 12'-8" | 1.50 | 32 | 200 | 114 | 69 | Baaltis |
| 4 | 110.00 | 10 | 13'-1" | 1.60 | 37 | 290 | 124 | 84 | Baangelt |
| 5 | 140.00 | 12 | 15'-9" | 2.15 | 45 | 380 | 110 | 126 | Bacilarios |
| 6 | 165.00 | 12 | 15'-10" | 2.15 | 46 | 390 | 130 | 126 | Bacillabas |
| 8 | 200.00 | 12 | 16'-3" | 2.70 | 51 | 470 | 135 | 168 | Bacillary |
| 10 | 240.00 | 12 | 16'-9" | 3.25 | 57 | 570 | 140 | 210 | Bacillatum |
| 12 | 300.00 | 12 | 16'-9" | 4.30 | 57 | 800 | 130† | 126† | Bacillorum |
| 16 | 360.00 | 12 | 17'-1" | 5.40 | 61 | 1000 | 135† | 168† | Bacilus |
| 20 | 425.00 | 12 | 18'-5" | 6.50 | 77 | 1375 | 140† | 210† | Bacinella |

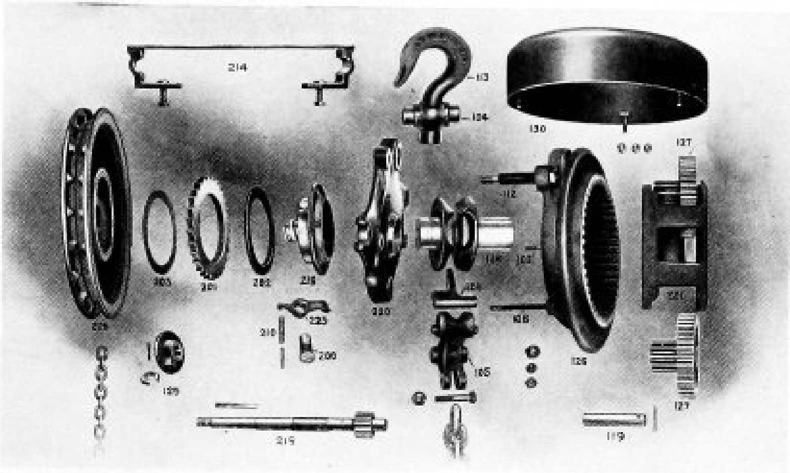
* Figures denote height in feet which blocks with regular lengths of chain will hoist above level on which operator stands. † For each hand chain.

**The chains and working parts of all Triplex Blocks from 4 to 20 tons capacity are interchangeable with the 2 ton size. The added power and strength is obtained by multiplying sheaves with heavy yokes and hooks.**



A Yale & Towne TRIPLEX Block loading cases.

A short length of steel I-Beam with a Triplex Block and Trolley can be easily put up anywhere to facilitate loading and unloading.



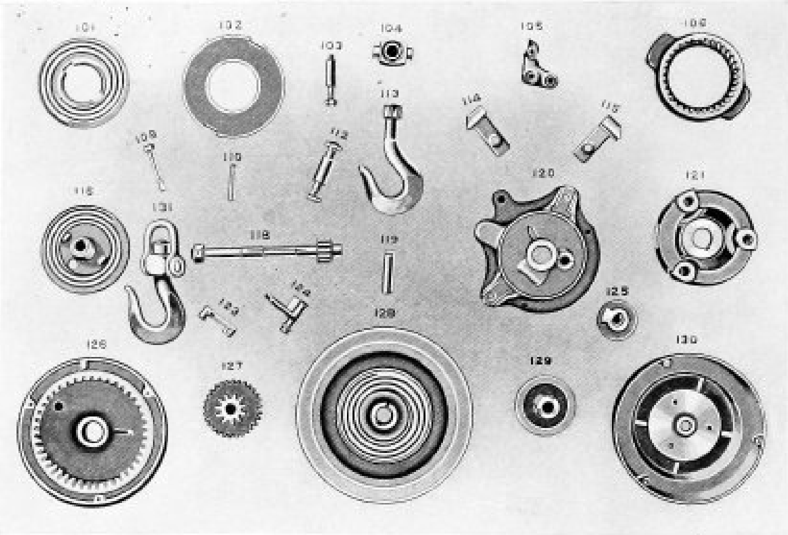
## Prices for Parts of Triplex Blocks, 1898 Model

All Blocks without "1898 Model" plainly cast on outside of Hand Wheel are Old Style; see page 14

| List No. | Name | ½ Ton | 1 Ton | 1½ Tons | 2 Tons | 3 Tons | 4 to 20 Tons |
|---|---|---|---|---|---|---|---|
| 103 | Small Separator . . . . . . . . | $ .40 | $ .50 | $ .60 | $ .70 | $ .60 | $ .70 |
| 104 | Top Cross Head . . . . . . . . | 1.00 | 1.40 | 2.00 | 2.40 | . . . | . . . . |
| 105 | Load Chain Guide . . . . . . . | .30 | .30 | .40 | .50 | .40 | .50 |
| 108 | Load Chain Guide Bolt . . . . | .20 | .20 | .30 | .40 | .30 | .40 |
| 112 | Large Separator . . . . . . . . | .60 | .70 | .80 | 1.00 | .80 | 1.00 |
| 113 | Top Hook . . . . . . . . . . . | 1.00 | 1.40 | 1.80 | 2.00 | . . . | . . . . |
| 114-5 | Hand Chain Guides, pair . . . | .75† | 1.20† | 1.50† | 1.80† | 1.50† | 1.80† |
| 119 | Gear and Pinion Pins . . . . . | .40 | .60 | .70 | .80 | .70 | .80 |
| 124 | Stripper . . . . . . . . . . . . | .30 | .40 | .50 | .50 | .50 | .50 |
| 125 | Check Washer . . . . . . . . . | .40 | .50 | .70 | .90 | .70 | .90 |
| 126 | Internal Gear . . . . . . . . . | 2.40 | 3.20 | 5.00 | 6.00 | 5.00 | 6.00 |
| 127 | Gear and Pinions . . . . . . . | .80‡ | 1.10‡ | 1.40‡ | 1.60‡ | 1.40‡ | 1.60‡ |
| 129 | Load Sheave . . . . . . . . . . | 1.50 | 2.00 | 2.30 | 2.80 | 2.30 | 2.80 |
| 130 | Gear Cover . . . . . . . . . . | 1.20 | 1.50 | 1.80 | 2.10 | 1.80 | 2.10 |
| 131 | Lower Swivel Hook . . . . . . | 1.50 | 2.30 | 3.20 | 5.50 | . . . | . . . . |
| 200 | Pawl Stud . . . . . . . . . . . | .40 | .40 | .50 | .50 | .50 | .50 |
| 201 | Ratchet Disc . . . . . . . . . | .80 | 1.00 | 1.40 | 1.50 | 1.40 | 1.50 |
| 202 | Leather Disc . . . . . . . . . . | .40 | .40 | .50 | .60 | .50 | .60 |
| 203 | Galvanized Iron Disc . . . . . | .40 | .40 | .50 | .60 | .50 | .60 |
| 210 | Pawl Spring . . . . . . . . . . | .20 | .20 | .30 | .30 | .30 | .30 |
| 214 | Strap Hand Chain Guide . . . | .75† | 1.20† | 1.50† | 1.80† | 1.50† | 1.80† |
| 216 | Disc Hub . . . . . . . . . . . . | 1.80 | 2.30 | 3.20 | 4.20 | 3.20 | 4.20 |
| 218 | Driving Pinion . . . . . . . . . | 3.00‡ | 4.00‡ | 5.00‡ | 6.00‡ | 5.00‡ | 6.00‡ |
| 220 | Ratchet Case . . . . . . . . . | 2.50 | 3.50 | 4.50 | 5.50 | 4.50 | 5.50 |
| 221 | Pinion Cage . . . . . . . . . . | 1.60 | 2.10 | 3.20 | 4.20 | 3.20 | 4.20 |
| 223 | Pawl . . . . . . . . . . . . . . | .20 | .20 | .30 | .30 | .30 | .30 |
| 228 | Hand Wheel . . . . . . . . . . | 1.80 | 2.30 | 3.00 | 3.60 | 3.00 | 3.60 |
|  | Load Chain, per foot . . . . . | .40* | .45* | .50* | .55* | .50* | .55* |
|  | Hand Chain, Steel, per foot . . | .25 | .25 | .25 | .25 | .25 | .25 |

---

*In ordering Load Chain specify whether or not hook is required.
†The Strap Hand Chain Guide No. 214 fits in the place of Nos. 114 and 115 and should be substituted.
‡Parts 218 and 127 should be specified "Quick Speed" for blocks so marked on the gear cover.
Always give model and size of block. Parts for Triplex Trolley Blocks, page 30, are special. Parts 129 and 221 are a driven fit. In putting together see that the gauging holes in No. 127 line up at the center.



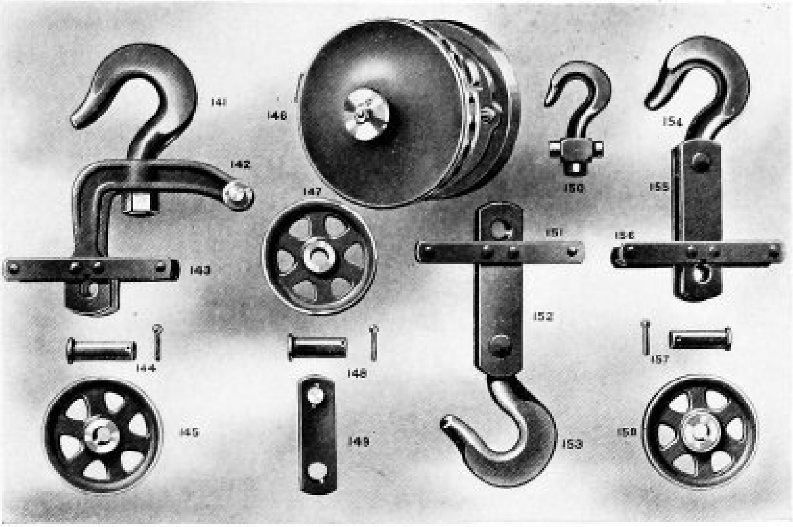
## Prices for Parts of Triplex Blocks, "Old Model."

Blocks with words "1898 Model" plainly cast on outside of Hand Wheel are new Model, see page 13. All others are old model.

| List No. | Name | ½ Ton | 1 Ton | 1½ Tons | 2 Tons | 3 Tons | 4 to 20 Tons |
|---|---|---|---|---|---|---|---|
| 101 | Intermediate Disc | $ .80 | $1.00 | $1.40 | $1.50 | $1.40 | $1.50 |
| 102 | Brass Discs, per pair | 2.00 | 2.50 | 2.80 | 3.00 | 2.80 | 3.00 |
| 103 | Small Separators | .40 | .50 | .60 | .70 | .60 | .70 |
| 104 | Top Cross Head | 1.00 | 1.40 | 2.00 | 2.40 | . . . | . . . . |
| 105 | Load Chain Guide | .30 | .30 | .40 | .50 | .40 | .50 |
| 106 | Ratchet Dog | .50 | .60 | .90 | 1.20 | .90 | 1.20 |
| 108 | Load Chain Guide Bolt | .20 | .20 | .30 | .40 | .30 | .40 |
| 110 | Pawl Spring | .20 | .20 | .30 | .30 | .30 | .30 |
| 112 | Large Separator | .60 | .70 | .80 | 1.00 | .80 | 1.00 |
| 113 | Top Hook | 1.00 | 1.40 | 1.80 | 2.00 | . . . | . . . . |
| 114 }<br>115 } | Hand Chain Guides, pair | .75 | 1.20 | 1.50 | 1.80 | 1.50 | 1.80 |
| 116 | Disc Hub | 1.80 | 2.30 | 3.20 | 4.20 | 3.20 | 4.20 |
| 118 | Driving Pinion | 3.00 | 4.00 | 5.00 | 6.00 | 5.00 | 6.00 |
| 119 | Gear and Pinion Studs, each | .40 | .60 | .70 | .80 | .70 | .80 |
| 120 | Ratchet Case | 2.50 | 3.50 | 4.50 | 5.50 | 4.50 | 5.50 |
| 121* | Pinion Cage | 1.60* | 2.10* | 3.20* | 4.20* | 3.20* | 4.20* |
| 123 | Pawl | .20 | .20 | .30 | .30 | .30 | .30 |
| 124 | Stripper | .30 | .40 | .50 | .50 | .50 | .50 |
| 125 | Check Washer | .40 | .50 | .70 | .90 | .70 | .90 |
| 126 | Internal Gear | 2.40 | 3.20 | 5.00 | 6.00 | 5.00 | 6.00 |
| 127 | Gear and Pinions, each | .80 | 1.10 | 1.40 | 1.60 | 1.40 | 1.60 |
| 128 | Hand Wheel | 1.80 | 2.30 | 3.00 | 3.60 | 3.00 | 3.60 |
| 129 | Load Sheave | 1.50 | 2.00 | 2.30 | 2.80 | 2.30 | 2.80 |
| 130 | Gear Cover | 1.20 | 1.50 | 1.80 | 2.10 | 1.80 | 2.10 |
| 131 | Lower Swivel Hook | 1.50 | 2.30 | 3.20 | 5.50 | . . . | . . . . |
|  | Load Chain, per foot | .40† | .45† | .50† | .55† | .50† | .55† |
|  | Hand Chain, per foot | .37½ | .37½ | .37½ | .37½ | .37½ | .37½ |

Part 221, page 13 is always substituted, discarding one gear and balancing better.

†In ordering Load Chain specify whether or not Hook is required.



# Prices for Parts of Triplex Blocks, 3 to 10 Tons

MAIN BLOCK PARTS.—For parts of "Main Block," (No. 146), see cuts and price list, page 13

| List No. | NAME | 3 Ton | 4 Ton | 5 Ton | 6 Ton | 8 Ton | 10 Ton |
|---|---|---|---|---|---|---|---|
| | **Top Block.** | | | | | | |
| 141 | Top Hook .......... | $3.00 | $5.00 | $6.00 | $7.00 | $12.00 | $15.00 |
| 142 | Top Yoke .......... | 11.00 | 15.00 | 18.00 | 28.00 | 35.00 | 42.00 |
| 143 | Top Guard and Guides .......... | ........ | ........ | 7.00 | 9.00 | 12.00 | 15.00 |
| 144 | Top Sheave Pin..... | ........ | ........ | 1.00 | 1.50 | 2.00 | 2.50 |
| 145 | Top Sheaves........ | ........ | ........ | 3.00 | 4.50 | 5.00 | 5.50 |
| | **Main Block.** | | | | | | |
| 146 | Main Block, A or B | $47.50 | $55.00 | $55.00 | $55.00 | $55.00 | $55.00 |
| 150 | Top Hook and Crosshead for Main Block, Type B.......... | 3.80 | 4.40 | 4.40 | 4.40 | 4.40 | 4.40 |
| | **Bottom Block.** | | | | | | |
| 147 | Bottom Sheave ..... | $3.00 | $4.50 | $5.00 | $6.00 | $6.00 | $7.00 |
| 148 | Bottom Sheave Pin.. | .80 | 1.30 | 1.50 | 2.00 | 2.50 | 3.00 |
| 149 | Becket Straps ...... | ........ | ........ | 4.00 | 6.00 | ........ | 8.00 |
| 151 | Bottom Guards and Guides .......... | 3.50 | 4.00 | 5.00 | 7.00 | 8.00 | 10.00 |
| 152 | Bottom Side Plates and Cross-head ............ | 5.00 | 6.00 | 9.00 | 12.00 | 15.00 | 25.00 |
| 153 | Bottom Hook....... | 3.00 | 5.00 | 6.00 | 7.00 | 12.00 | 15.00 |

# Yale & Towne
# Duplex Block

Patented

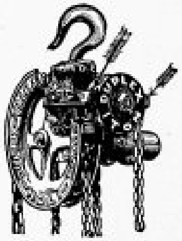
## Screw-Geared

THE DUPLEX is the popular type of double chain worm-wheel or screw block. It is next best to the Triplex, and its efficiency is 25 per cent higher than other screw hoists. For portable use the Duplex is light and powerful and takes up the least head-room.

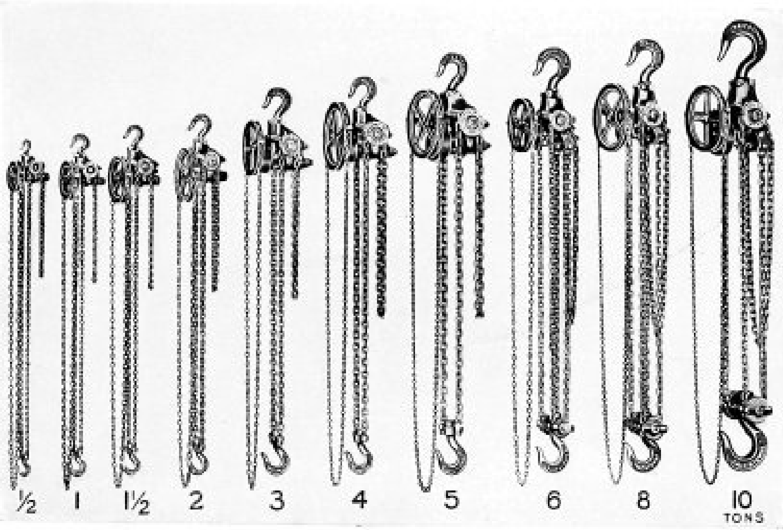
The hand-chain guides are so placed that the operator can stand clear of the load without wasting energy in dragging the chain through the guides. The safety load-chain guides prevent slipping and the swivel connections prevent fouling of the chain. The bronze worm wheels and steel worms have hardened and ground thrust-bearings and run in oil.

For shifting about in general use the Duplex is the handy block. With it one man can lift the heaviest loads. Where the higher speed of the Triplex is not required, the Duplex Block is the best chain block made. It is absolutely impossible for the load-chains to slip, because these safety guides prevent it.

The chain used on all Yale & Towne Blocks is made from a special grade of tough iron by a patented process which hardens it and makes the pitch of the links accurate.



Note the safety guides, rendering it impossible for load chain to slip.



The Duplex Block, ½ to 10 Tons.

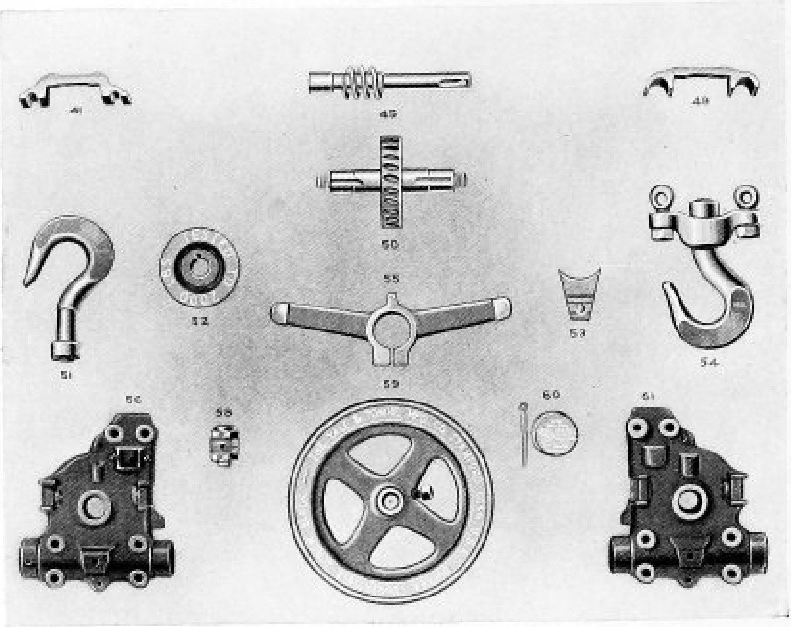
| Capacity in Tons | Price Complete | Regular Hoist in Feet * | Extra Hoist Price per Foot | Minimum Distance between Hooks in Inches. | Reach in Feet and Inches † | Net Weight in Lbs. | Chain Pull ‡ | | TELEGRAPHIC CODE WORD |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Lbs. | Feet | |
| ½ | $ 25.00 | 8 | $1.20 | 13 | 9′—1″ | 43 | 68 | 40 | Balistaire |
| 1 | 30.00 | 8 | 1.50 | 16 | 9′—4″ | 57 | 87 | 59 | Balistario |
| 1½ | 40.00 | 8 | 1.75 | 19 | 9′—7″ | 76 | 94 | 80 | Balisticos |
| 2 | 50.00 | 9 | 2.00 | 21 | 10′—9″ | 104 | 115 | 93 | Balistidae |
| 3 | 75.00 | 10 | 2.20 | 25 | 12′—1″ | 180 | 132 | 126 | Balistik |
| 4 | 95.00 | 10 | 2.40 | 29 | 12′—5″ | 215 | 142 | 155 | Balitsama |
| 5 | 140.00 | 12 | 3.00 | 31 | 14′—7″ | 330 | 145 | 195 | Balivamo |
| 6 | 180.00 | 12 | 3.75 | 33 | 14′—9″ | 340 | 145 | 252 | Balizador |
| 8 | 210.00 | 12 | 4.00 | 36 | 15′—0″ | 380 | 160 | 310 | Baltrakan |
| 10 | 275.00 | 12 | 4.25 | 45 | 15′—9″ | 560 | 160 | 390 | Baltzar |

---

*Figures denote height in feet which blocks, with regular lengths of chain, will hoist from level on which operator stands. Extra lengths of chain should be ordered when it is desired to hoist higher. No deduction is made for blocks with less than the regular length of chain.

†The "Reach" is the sum of the "Hoist" and the "Minimum Distance between Hooks." When hung at this height, to lift the full hoist above the floor, the hand chain of Triplex and Duplex blocks hangs down to within 18 inches of the floor.

‡Figures denote the pull in pounds required to lift the full load, and the number of feet of hand chain which must be handled to lift the load one foot.



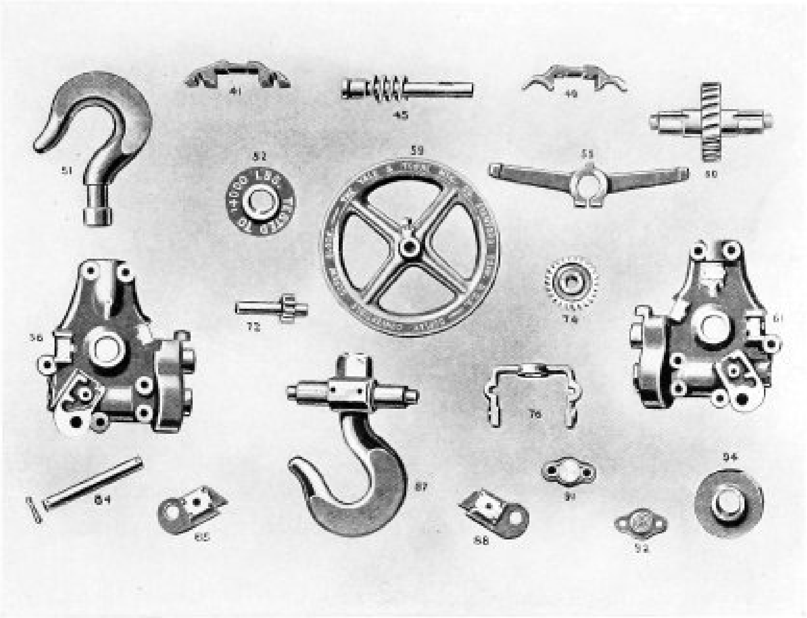
## Prices for Parts of Duplex Blocks, ½ to 5 Tons

For 3 to 5 Ton sizes see also numbers, 72, 74, 91 and 92 on opposite page.

| List No. | Name | ½ Ton | 1 Ton | 1½ Tons | 2 Tons | 3 Tons | 3½ Tons | 4 Tons | 5 Tons |
|---|---|---|---|---|---|---|---|---|---|
| 41 | Load Chain Guide . . . | $ .40 | $ .50 | $ .60 | $ .70 | $1.00 | $1.20 | $1.40 | $ 1.60 |
| 45 | Worm and Shaft . . . | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 | 6.00 | 7.00 | 10.00 |
| 49 | Load Chain Guard . . . | .30 | .40 | .50 | .60 | .70 | .80 | .90 | 1.00 |
| 50 | Worm Wheel . . . . . | 3.50 | 4.00 | 5.00 | 6.00 | 7.00 | 9.00 | 11.00 | 15.00 |
| 51 | Top Hook . . . . . . | 1.00 | 1.40 | 1.80 | 2.40 | 3.00 | 4.00 | 5.00 | 6.00 |
| 52 | Load Sheave, per pair . | 1.50 | 2.00 | 2.50 | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 |
| 53 | Strippers, per pair . . . | .30 | .40 | .50 | .60 | .70 | .80 | .90 | 1.00 |
| 54 | Bottom Hook Swivel and Eye Bolts . . . . . | 2.00 | 2.50 | 3.00 | 3.50 | 4.50 | 5.00 | 6.00 | 8.00 |
| 55 | Hand Chain Guide . . | .90 | 1.00 | 1.30 | 1.80 | 2.00 | 2.40 | 2.60 | 2.80 |
| 56<br>61 | Housing, each half . . . | 2.50 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 10.00 | 15.00 |
| 58 | Friction Plug . . . . . | 1.20 | 1.40 | 1.70 | 2.00 | . . . . | . . . . | . . . . | . . . . |
| 59 | Hand Wheel (see note below) | 1.50* | 1.60* | 2.50* | 3.00* | 3.50 | 4.00 | 4.50 | 5.00 |
| 60 | Friction Plug Cover . . | .30 | .30 | .40 | .50 | . . . . | . . . . | . . . . | . . . . |
| 72 | Pinion Shaft . . . . . . | . . . . | . . . . | . . . . | . . . . | 4.00 | 4.20 | 4.40 | 4.60 |
| 74 | Gear . . . . . . . . | . . . . | . . . . | . . . . | . . . . | 1.60 | 1.80 | 2.00 | 2.20 |
| 91 | Friction Plug Cover . . | . . . . | . . . . | . . . . | . . . . | .50 | .50 | .50 | .50 |
| 92 | Friction Plug . . . . . | . . . . | . . . . | . . . . | . . . . | 2.50 | 3.00 | 3.50 | 4.00 |
|  | Hand Chain, per foot* . | .25† | .25† | .25† | .25† | .25 | .40 | .40 | .40 |
|  | Load Chain, per foot . | .37½ | .40 | .42½ | .45 | .50 | .55 | .55 | .60 |

* In ordering Hand Wheels or Hand Chain note number of pockets for chain links in rim of wheel.

† Welded hand chain for old model Blocks $ .37½ per foot for ½, 1, 1½ and 2 Ton sizes.



## Prices for Parts of Duplex Blocks 6 to 10 Tons

For parts of Blocks ½ to 5 Tons; see opposite page.

| List No. | NAME | 6 Ton | 7 Ton | 8 Ton | 10 Ton |
|---|---|---|---|---|---|
| 41 | Load Chain Guide . . . . . . . . . . | $1.70 | $1.80 | $1.90 | $2.50 |
| 45 | Worm and Shaft . . . . . . . . . . | 12.00 | 16.00 | 18.00 | 22.00 |
| 49 | Load Chain Guard . . . . . . . . . | 1.10 | 1.20 | 1.30 | 1.40 |
| 50 | Worm Wheel . . . . . . . . . . . | 16.00 | 18.00 | 20.00 | 25.00 |
| 51 | Top Hook . . . . . . . . . . . . | 7.00 | 8.00 | 12.00 | 15.00 |
| 52 | Load Sheave, per pair . . . . . . . . | 5.50 | 6.00 | 8.00 | 9.00 |
| 55 | Hand Chain Guides . . . . . . . . . | 3.00 | 3.00 | 3.00 | 4.00 |
| 56 & 61 | Housing, each half . . . . . . . . | 16.00 | 18.00 | 20.00 | 30.00 |
| 59 | Hand Wheel . . . . . . . . . . . | 5.00 | 5.00 | 6.50 | 7.00 |
| 72 | Pinion Shaft . . . . . . . . . . . | 4.80 | 5.00 | 5.20 | 6.00 |
| 74 | Gear . . . . . . . . . . . . . . | 2.30 | 2.40 | 2.50 | 3.00 |
| 76 | Bottom Guides, per pair . . . . . . | 4.50 | 5.00 | 6.00 | 7.00 |
| 84 | Clevis Pin . . . . . . . . . . . . | .50 | .60 | .70 | 1.00 |
| 85 & 88 | Strippers, per pair . . . . . . . . | 1.50 | 2.00 | 2.50 | 3.50 |
| 87 | Bottom Hook, Swivel and Eye Bolts | 12.00 | 16.00 | 20.00 | 25.00 |
| 91 | Friction Plug Cover . . . . . . . . | .50 | .50 | .60 | .60 |
| 92 | Friction Plug . . . . . . . . . . . | 4.20 | 4.40 | 4.60 | 5.40 |
| 94 | Bottom Sheaves, per pair . . . . . . | 3.00 | 4.00 | 6.00 | 7.00 |
|  | Load Chain, per foot . . . . . . . . | .50 | .55 | .55 | .60 |
|  | Hand Chain, Welded, per foot . . . . | .40 | .40 | .40 | .40 |

Nos. 72, 74, 91 and 92 in above illustration are also used in the 3, 3½, 4 and 5 ton sizes listed on opposite page. The prices are the same as for the 6, 7, 8 and 10 ton sizes respectively.

# Yale & Towne
# Differential Block

### The Original Weston's Patent

THE Y. & T. DIFFERENTIAL BLOCK is a simple, cheap and safe type of chain block and has the fewest parts of any block made. It handles heavy loads readily, and is sold at the lowest price possible for any reliable block. For use on farms and plantations, and for all ordinary hoisting purposes, this Block will do the work of several men with rope-tackle, jacks, skids, crowbars and rollers. Heat and cold do not affect it and it will stand all kinds of weather. Five rope hoists will not last as long as one Differential Block.

In view of its reliability and low cost the Y. & T. Differential Block should be selected in all cases where the higher power and durability of the Triplex and Duplex Blocks are not required.

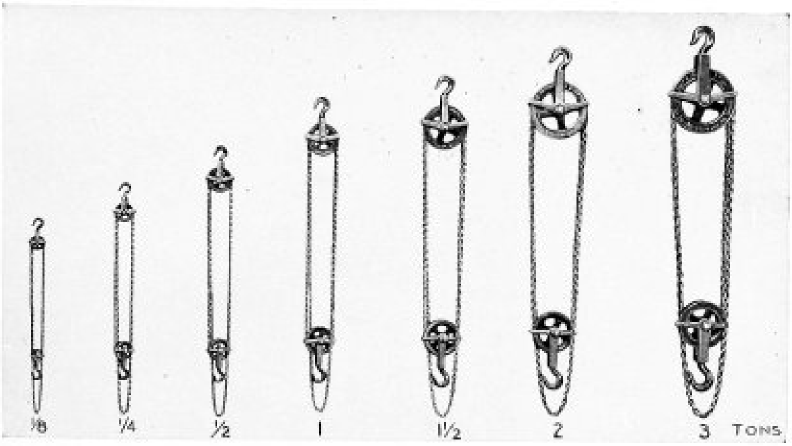
The genuine Y. & T. Weston Differential Blocks have large sheaves and full sized chain of special material.

The Chain is gauged by a patented process which hardens it and makes it gear accurately with the carefully formed sprockets.

This causes the Block to run easily under load and precludes the stretching of the Chain, which so quickly destroys the usefulness and safety of imitations of the genuine Weston Block.

YALE & TOWNE MFG. CO. STAMFORD CONN. SOLE MAKERS

Note that the Company's name is cast on both the top and bottom sheaves. It is a guarantee of durability and ready duplication of parts.



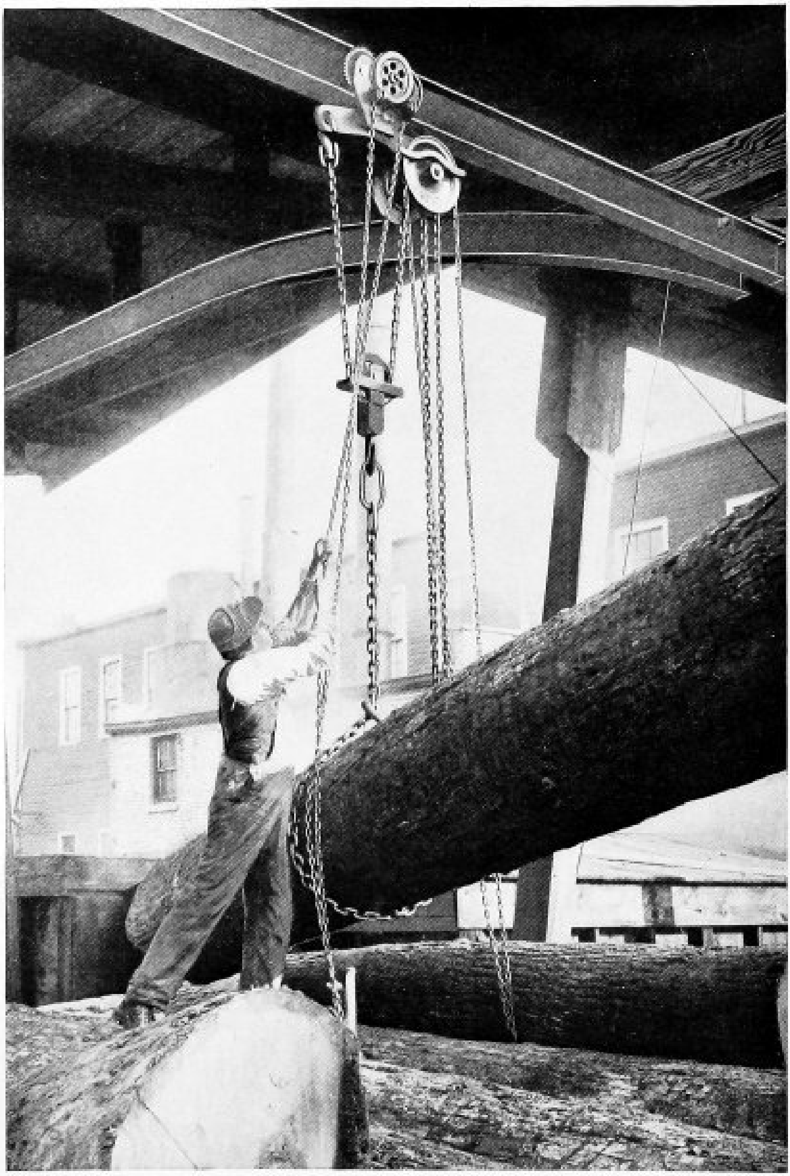
## The Differential Block, ⅛ to 3 Tons.

| Capacity in Tons | Price Complete | Regular Hoist in Feet | Extra Hoist Price per Ft.* | Minimum Distance in Inches Between Hooks | Net Weight in Pounds | Chain Pull | | TELEGRAPHIC CODE WORD |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Pounds | Feet | |
| ⅛ | $18.00 | 5 | $2.80 | 16 | 11 | . . . . | . . . . | Baptismum |
| ¼ | 18.00 | 6 | 2.80 | 17 | 22 | 72 | 18 | Baptistic |
| ½ | 21.00 | 7 | 2.80 | 21 | 30 | 122 | 24 | Baptizable |
| 1 | 28.00 | 8 | 3.00 | 26 | 51 | 216 | 30 | Baptizabo |
| 1½ | 36.00 | 8½ | 3.20 | 32 | 81 | 246 | 36 | Baptizares |
| 2 | 45.00 | 9 | 3.40 | 39 | 122 | 308 | 42 | Baptizas |
| 3 | 60.00 | 9½ | 4.00 | 44 | 180 | 557 | 38 | Baptizator |

*Each foot of extra hoist includes 4 feet of chain.

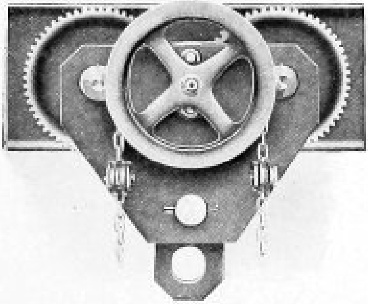
## Parts for Repairs.

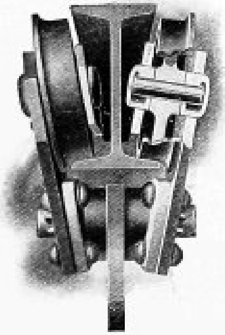
| List No. | Name of Parts | CAPACITY IN TONS | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | ⅛ | ¼ | ½ | 1 | 1½ | 2 | 3 |
| 11 | Top Yoke and Hook . . | $3.00 | $3.00 | $3.75 | $4.50 | $5.50 | $7.50 | $11.00 |
| 12 | Top Sheave . . . . . . | 3.60 | 3.60 | 4.80 | 6.00 | 8.40 | 12.00 | 15.60 |
| 13 | Bottom Sheave . . . . . | .90 | .90 | 1.30 | 1.50 | 1.90 | 2.25 | 3.75 |
| 14 | Bottom Yoke and Hook . . | 2.25 | 2.25 | 3.00 | 3.75 | 4.50 | 5.50 | 8.00 |
| 15 | Top Sheave Pin . . . . | .40 | .40 | .50 | .50 | .60 | .60 | .70 |
| 16 | Bottom Sheave Pin . . . | .30 | .30 | .40 | .40 | .50 | .50 | .60 |
| | Regular Chain . . . . . | 10.50 | 10.50 | 12.50 | 17.00 | 21.50 | 27.00 | 36.00 |



Conveying with blocks and trolleys.

# Trolleys and Cranes





Brown Steel Trolley

Also Triplex Trolley Blocks, Overhead Track, Crabs and Winches.

# Trolleys and Cranes

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# Trolleys and Cranes, Overhead Track, Crabs and Winches, And Their Applications

EASY transportation is as important as quick lifting in handling material. A strong man will handle 500 lbs. on a floor truck. The same man will handle 10,000 lbs. on an overhead I-Beam trolley. It is up out of the way, requires no floor space or cleared passages and enables one man to tier cases almost to the ceiling.

Very little preparation is necessary for installing the I-Beam track. The important parts are the Trolley and Triplex Block. The track may be 10 feet long or a mile. It comes all fitted and drilled with patent hanger bolts, so that any one can bolt it up against the under side of the roof girders.

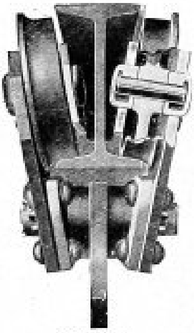
A few feet of I-Beam with a Trolley and Block enable a man to install heavy machinery and handle work that usually requires a gang of riggers. The I-Beam may rest on the walls, on timber trestles, or be lashed to the roof girders.

With a five ton Brown Patent Plain Trolley one man can handle 10,000 lbs. on a good I-Beam Track by pushing or pulling 60 lbs. on the load. The ease, speed and durability of "Brown" Steel Trolleys will surprise those accustomed to ordinary Trolleys, or those of home construction, which, though seemingly cheap are often the most expensive in the end.

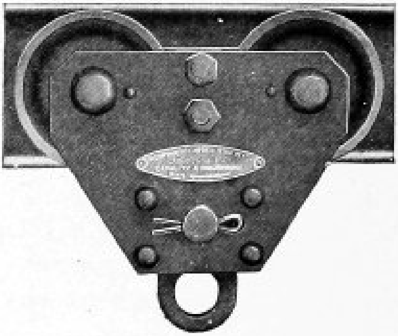
The table on the next page gives the pull to start Plain Trolleys along a good track. The Geared Trolleys on page 27 are remarkably fast and easy running and are recommended where it is desired to move the load accurately within a few inches.

# Brown Patent Steel Trolleys

### Four Wheeled—For Standard Light Steel I-Beams



End View



Plain Trolley

Brown Steel Trolleys are the strongest, most durable and easiest running trolleys made. They are designed so the lines of force due to the load, meet at the point where the load is suspended in the trolley eye, giving a large factor of safety.

All parts subject to tensile or bending stress are wrought steel. The two sides are connected by a pin allowing a free turning

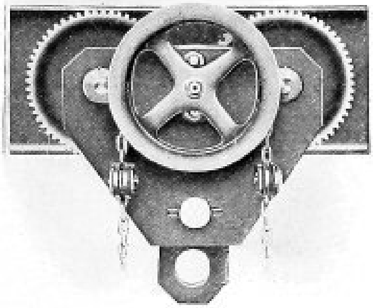
## Brown Plain Steel Trolleys

| Capacity in Tons | Standard Size of I-Beam | Greatest Distance between Supports | Price | Weight in Lbs. | Smallest Radius for I-Beam curve | Diameter of Tread of Wheels | Direct pull to start fully loaded trolley along track |
|---|---|---|---|---|---|---|---|
| ¼ | 4 in. | 14 feet | $ 18.00 | 25 lbs. | 18 in. | 3½ in. | 25 lbs. |
| ½ | 5 " | 14 " | 20.00 | 30 " | 21 " | 4 " | 26 " |
| 1 | 6 " | 13 " | 25.00 | 50 " | 21 " | 5 " | 47 " |
| 1½ | 7 " | 13 " | 35.00 | 95 " | 34 " | 6 " | 65 " |
| 2 | 8 " | 13 " | 40.00 | 115 " | 36 " | 7 " | 74 " |
| 3 | 9 " | 13 " | 50.00 | 140 " | 42 " | 8 " | 106 " |
| 4 | 10 " | 13 " | 60.00 | 210 " | 48 " | 9 " | 145 " |
| 5 | 12 " | 15 " | 80.00 | 300 " | 54 " | 10½ " | 60 " |
| 6 | 15 " | 18 " | 120.00 | 530 " | 66 " | 13 " | 70 " |
| 8 | 20 " | 25 " | 140.00 | 550 " | 66 " | 13 " | 90 " |
| 10 | 24 " | 27 " | 150.00 | 600 " | 66 " | 13 " | 115 " |
| 12 | 24 " | 23 " | 260.00 | 1500 " | 96 " | 18 " | 150 " |
| 15 | 24 " | 20 " | 300.00 | 1550 " | 96 " | 18 " | 180 " |
| 20 | 24 " | 16 " | 350.00 | 2800 " | 96 " | 18 " | 260 " |

For trolleys with current collectors for use with electric hoists. See pages 59 to 68.

movement, thus enabling the wheels to adjust themselves to any irregularities in the track. This insures the load always being equally distributed on the four wheels. It also eases the trolley in rounding short curves.

The construction of the trolley enables it to be widened for larger beams than standard, and further permits it to be placed on an I–Beam which has both ends imbedded in the walls.



**Geared Trolley**

Each wheel has an axle pressed in, and this axle runs in a pair of Brown Patent Bronze Bearings. (Note "End View" on opposite page.) This provides strong and easy running bearings. They are self-adjusting, exclude dust and have large oil cavities. The wheels are as large in diameter as the I-Beam permits. This facilitates easy movement and steady running.

Brown Trolleys run as easily after many years service as when new. They enable one man to convey a two-horse truck load.

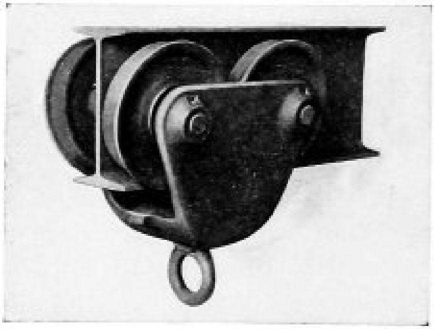
## Brown Geared Steel Trolleys

| Capacity in Tons | Standard Size of I-Beam | Greatest distance between supports | Price | Weight in Lbs. | Smallest Radius for I-Beam curve | Diameter of Tread of Wheels | Pull on hand chain to move fully loaded trolley along track |
|---|---|---|---|---|---|---|---|
| ½ | 5 in. | 14 feet | . . . | . . | . . | . . | . . |
| 1 | 6 " | 13 " | $ 55.00 | 90 | 21 in. | 5 in. | 15 lbs. |
| 1½ | 7 " | 13 " | 60.00 | 140 | 21 " | 5 " | 24 " |
| 2 | 8 " | 13 " | 65.00 | 165 | 36 " | 7 " | 23 " |
| 3 | 9 " | 13 " | 70.00 | 180 | 36 " | 7 " | 30 " |
| 4 | 10 " | 13 " | 100.00 | 320 | 48 " | 9 " | 45 " |
| 5 | 12 " | 15 " | 110.00 | 350 | 48 " | 9 " | 55 " |
| 6 | 15 " | 18 " | 160.00 | 600 | 60 " | 13 " | 23 " |
| 8 | 20 " | 25 " | 170.00 | 650 | 60 " | 13 " | 28 " |
| 10 | 24 " | 27 " | 190.00 | 670 | 60 " | 13 " | 35 " |
| 12 | 24 " | 23 " | 410.00 | 1600 | 96 " | 18 " | 42 " |
| 15 | 24 " | 20 " | 420.00 | 1650 | 96 " | 18 " | 44 " |
| 20 | 24 " | 16 " | 500.00 | 3000 | 96 " | 18 " | 49 " |

# "Brown" Cast Iron Trolleys

These can only be used on standard beams of the weights specified below.

Where the absolute safety, easy running qualities and durability of Brown Steel Trolleys (described, illustrated and priced on pages 26 and 27) are not wanted, Cast Iron and Flat Rail Trolleys afford excellent equipment.

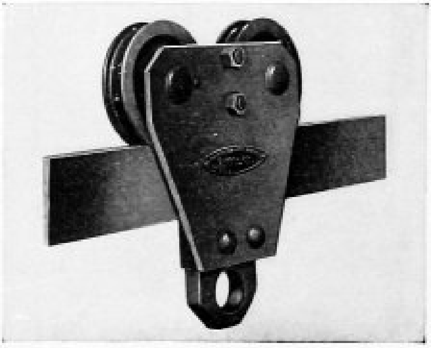


| Capacity in Tons | Size of I-Beam | Price |
|---|---|---|
| WITH PLAIN BEARINGS | | |
| ½ | 5 in.—9¾ lb. | $12.00 |
| 1 | 6 " –12¼ " | 16.00 |
| 1½ | 7 " –15 " | 20.00 |
| 2 | 8 " –18 " | 25.00 |
| WITH ROLLER BEARINGS | | |
| 1 | 6 in.–12¼ lb. | $25.00 |
| 1½ | 7 " –15 " | 27.50 |
| 2 | 8 " –18 " | 30.00 |
| 3 | 9 " –21 " | 50.00 |

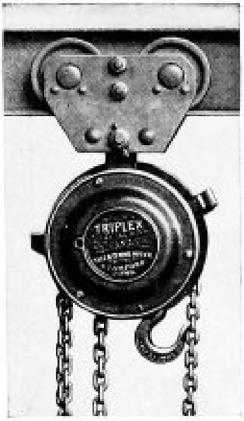
# "Brown" Flat Rail Trolleys

To run on flat steel bars

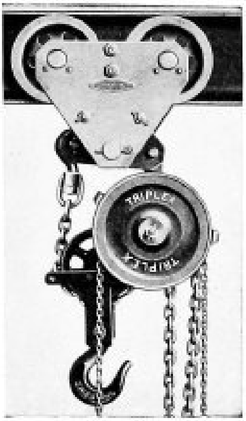
The "Plain" trolley is shown in the cut. The "Geared" trolley is fitted with hand chain and sprocket wheel for trolley travel.



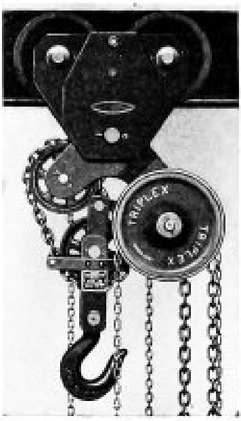
| Capacity in Tons | Size of Rail in inches | Greatest Distance between Hangers | Price of Trolleys | |
|---|---|---|---|---|
| | | | Plain | Geared |
| ¼ | 3 x ½ | 6 ft. | $12.00 | $30.00 |
| ½ | 3 x ½ | 5 " | 12.00 | 30.00 |
| 1 | 4 x ¾ | 6 " | 20.00 | 35.00 |
| 1½ | 4 x ¾ | 5 " | 20.00 | 35.00 |
| 2 | 4 x ¾ | 4 " | 20.00 | 35.00 |
| 3 | 6 x 1 | 6 " | 35.00 | 50.00 |
| 4 | 6 x 1 | 5 " | 35.00 | 50.00 |



½ to 2 tons



3 to 4 tons



5 to 10 tons

# Trolleys and Triplex Blocks with Clevis Connections

These trolleys, both "plain" and "geared" are shown separately on pages 26 and 27. As shown above the blocks are attached by special clevises in place of upper hooks, in order to save headroom. Where room permits the usual hook connection is preferred, because more flexible.

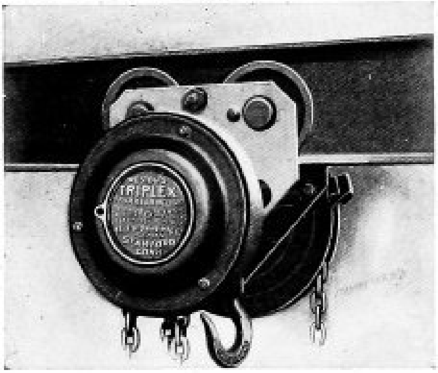
| Capacity in Tons | Standard Sizes of I-Beam in Inches | Regular Hoist in Feet* | With Plain Trolley | With Geared Trolley | Minimum Distance from Bottom of I-Beam to Inside of Lower Hook in In. |
|---|---|---|---|---|---|
| ½ | 5 | 8 | $ 65.00 | . . . . | 13 |
| 1 | 6 | 8 | 80.00 | $110.00 | 17 |
| 1½ | 7 | 8 | 105.00 | 130.00 | 20 |
| 2 | 8 | 9 | 120.00 | 145.00 | 21 |
| 3 | 9 | 10 | 140.00 | 160.00 | 26½ |
| 4 | 10 | 10 | 170.00 | 210.00 | 38 |
| 5 | 12 | 12 | 220.00 | 250.00 | 41 |
| 6 | 15 | 12 | 285.00 | 325.00 | 41 |
| 8 | 20 | 12 | 340.00 | 370.00 | 48 |
| 10 | 24 | 12 | 390.00 | 430.00 | 48 |

*For price of extra hoist with plain trolley see regular Triplex Block.

Extra hoist with geared trolley same price as extra hoist for Triplex Blocks plus 50 cents per foot.

# The Triplex Trolley Block

This consists of a Triplex Block combined with a trolley in compact form, and takes up no more space than that ordinarily required for the track and trolley only.



This is of great importance where it is desired to lift a load as close to the ceiling as possible.

The Triplex Trolley Blocks are used for the safe and rapid handling of ammunition on the latest United States battleships.

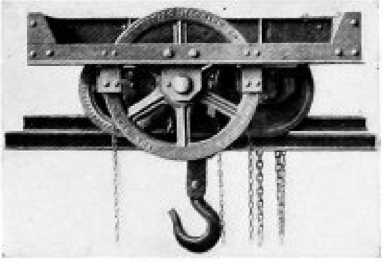
| Capacity in Tons | Price Complete | Hoist in Feet* | Price of ExtraHoist per Foot | Size of I-Beam | Minimum Distance between Hook and I-Beam | Extreme Width | Net Weight in lbs, |
|---|---|---|---|---|---|---|---|
| ½ | $70.00 | 8 | $ .90 | 5 in. | 8½ in. | 12¾ in. | 105 |
| 1 | 85.00 | 8 | .95 | 6 " | 10½ " | 14 " | 168 |
| 1½ | 115.00 | 8 | 1.00 | 7 " | 12 " | 17 " | 210 |
| 2 | 135.00 | 9 | 1.05 | 8 " | 16½ " | 19 " | 280 |

* The "Hoist" is the travel of hook from the floor to the highest point. The greatest height to the bottom of the I-beam for which this hoist is suitable is the sum of the "hoist" and the minimum distance between Hook and "I" beam; at this height the hand-chain hangs down within 18 inches of the floor.

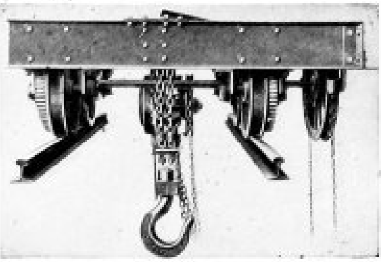
Triplex Trolley Blocks are too wide to pass the regular switches (page 40), but special switches can be furnished if required. Additional price for widening to suit larger beams, $25.00.

## Greatest Safe Distance in feet between Supports for Steel I-Beams. Standard Light Sections.

| Size of I-Beam | Load on Trolley in Tons for Single I-Beam Without Joints | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ¼ | ½ | 1 | 1½ | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| 4 ins. | 14 | | | | | | | | | | | |
| 5 " | 16 | 14 | | | | | | | | | | |
| 6 " | 18 | 17 | 13 | | | | | | | | | |
| 7 " | 24 | 23 | 18 | 15 | | | | | | | | |
| 8 " | 26 | 24 | 20 | 17 | 15 | | | | | | | |
| 9 " | . . . | . . . | 24 | 20 | 18 | 14 | | | | | | |
| 10 " | . . . | . . . | 27 | 24 | 21 | 17 | 14 | 12 | | | | |
| 12 " | . . . | . . . | . . . | 30 | 26 | 22 | 19 | 17 | 15 | 13 | | |
| 15 " | . . . | . . . | . . . | . . . | 32 | 27 | 24 | 22 | 19 | 17 | 16 | |
| 20 " | . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . | 33 | 31 | 30 | 26 |
| 24 " | . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . | 37 | 33 |



Side View



End View

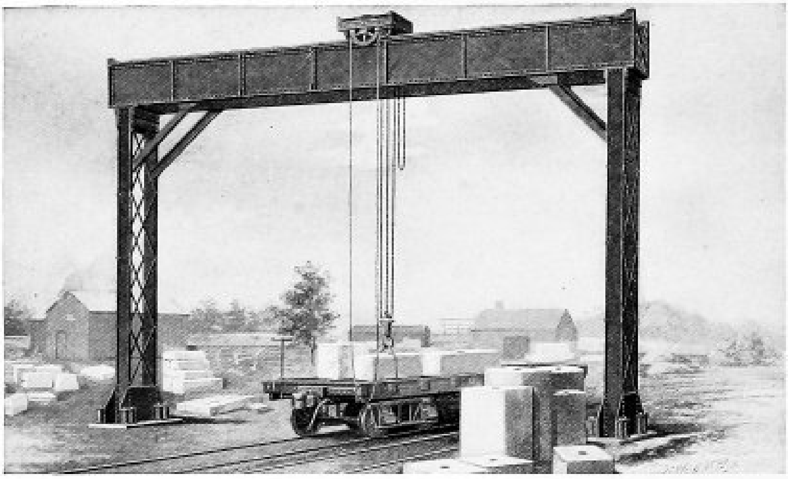
## "Brown" Patent Crane Trolleys

These consist of Yale & Towne Triplex Blocks built into trolleys to run on top of two parallel beams. They are adapted for use on hand cranes, stationary bridges or overhead tramways. All hoisting and traversing mechanism is provided with the trolley. Only the track or bridge need be supplied by the purchaser and it may be built of wood or steel.

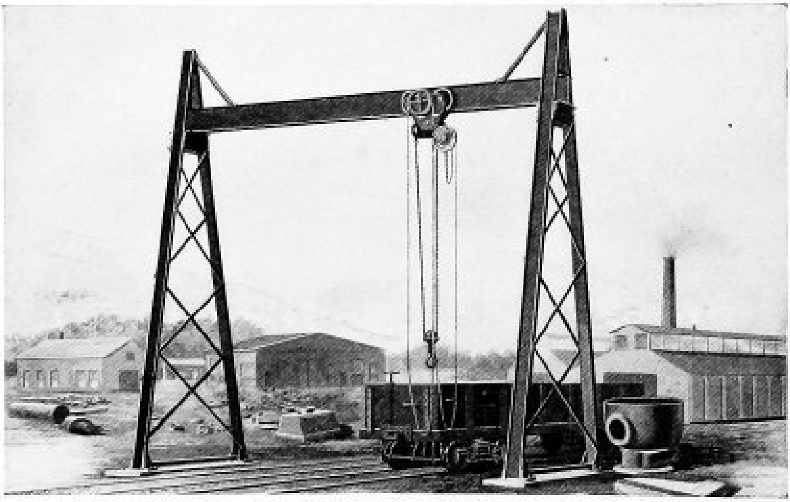
The trolley travel is effected by pendant hand chain in the large sprocket wheel shown above.

The frame is built up of steel shapes with four truck wheels fast on their axles running in roller bearings on both sides of the wheels. The rollers are kept parallel by bronze cages and run in steel bushings. Double flanged truck wheels are supplied for standard rails. Special truck wheels may be used to run on I-beam without rails.

| Capacity in Tons | Price | Weight in Lbs. | Center distance between Beams or "Gauge" | | Size of T-Rail | | Height above Track in Inches | Minimum distance of Hook in Inches below Top of Trolley | Hand Chain Pull in lbs. to move Trolley with Full Load | Feet of Hand Chain to be operated to move Trolley 1 Foot | | Speed of Travel for one man with Full Load in Feet per minute |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ft. | In. | Ins. | Lbs. | | | | Ft. | In. | |
| 1 | $200.00 | 600 | 2 | 0 | 2¼ | 16 | 12 | 20 | 9 | 2 | 7 | 85 |
| 2 | 250.00 | 800 | 2 | 4 | 2¼ | 16 | 13 | 23 | 15 | 2 | 7 | 80 |
| 3 | 300.00 | 1000 | 2 | 4 | 2¼ | 16 | 13 | 31 | 13 | 3 | 8 | 75 |
| 4 | 340.00 | 1300 | 2 | 4 | 2¼ | 16 | 13 | 34 | 17 | 3 | 8 | 70 |
| 5 | 370.00 | 1400 | 2 | 4 | 2½ | 20 | 18 | 43 | 19 | 3 | 9 | 65 |
| 6 | 410.00 | 1600 | 2 | 4 | 2½ | 20 | 18 | 43 | 22 | 3 | 9 | 60 |
| 8 | 510.00 | 2000 | 2 | 6 | 2¾ | 25 | 23 | 44 | 25 | 3 | 9 | 55 |
| 10 | 580.00 | 2200 | 2 | 6 | 2¾ | 25 | 23 | 46 | 30 | 3 | 9 | 50 |
| 15 | 780.00 | 3100 | 3 | 6 | 3 | 30 | 25 | 56 | 45 | 6 | | 22 |
| 20 | 840.00 | 3500 | 3 | 6 | 3 | 30 | 25 | 64 | 60 | 6 | | 16 |



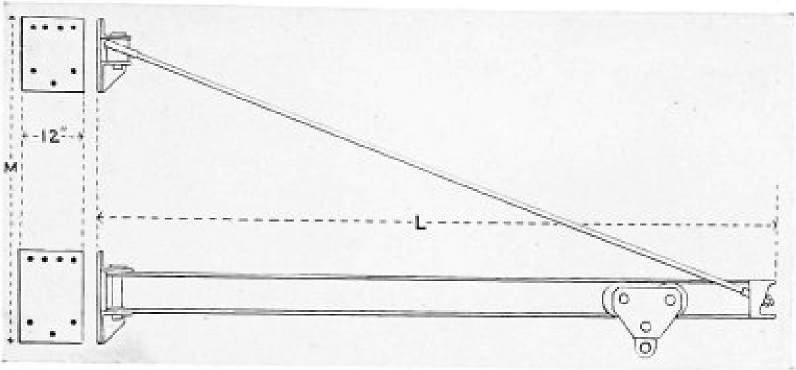
Brown Crane Trolley with Triplex Block. See page 31.



Geared Trolley and Triplex Block on a loading crane. See page 29.

## Triplex Blocks and Trolleys on Loading Cranes

These may be easily constructed with steel or wooden frame for use with standard Triplex Blocks and trolleys. Standard cranes like the above are furnished by reliable crane builders.



# Swinging Bracket Jibs complete with Trolleys

**I-Beam jibs with double adjustable tie rods and self oiling bearings.**

These are designed to increase the usefulness of individual hoists over machines for erecting, assembling and handling all kinds of work. The swing of the jib covers a large area of floor.

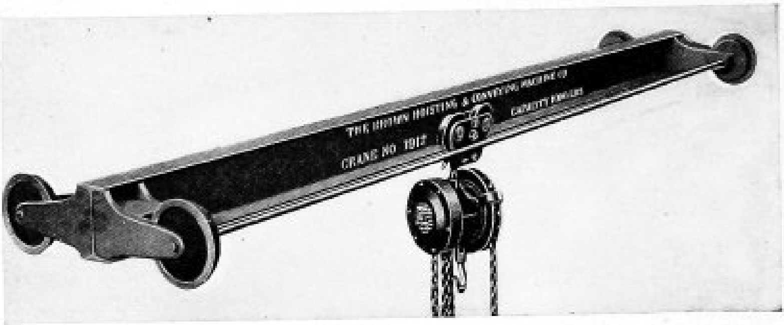
These jibs may be easily and quickly put up by any workman, and are very efficient for supplementing traveling cranes or overhead carrier systems.

For prices of Triplex Blocks see page 11.

| Capacity in Tons | Dimensions in feet and inches | | Size of I-Beam | Weight without Trolley | PRICES | | |
|---|---|---|---|---|---|---|---|
| | L | M | | | Without Trolley | With Cast Iron Trolley | With Steel Plate Trolley |
| 1 | 11′— 6″ | 5′—3½″ | 8″—18 lbs. | 440 lbs. | $ 65.00 | $ 90.00 | $ 90.00 |
| 1 | 13′—11″ | 5′—3½″ | 8″—18 " | 505 " | 70.00 | 95.00 | 95.00 |
| 1 | 16′— 5″ | 6′—3½″ | 8″—18 " | 565 " | 75.00 | 100.00 | 100.00 |
| 2 | 11′— 7″ | 5′—3½″ | 8″—18 " | 460 " | 70.00 | 95.00 | 110.00 |
| 2 | 14′— 1″ | 5′—3½″ | 8″—18 " | 525 " | 75.00 | 100.00 | 115.00 |
| 2 | 16′— 7″ | 6′—3½″ | 9″—21 " | 645 " | 80.00 | . . . . . | 120.00 |
| 3 | 11′— 0″ | 6′—3½″ | 9″—21 " | 525 " | 75.00 | . . . . . | 125.00 |
| 3 | 14′— 7″ | 6′—3½″ | 9″—21 " | 600 " | 80.00 | . . . . . | 130.00 |
| 3 | 16′— 8″ | 7′—4½″ | 10″—25 " | 750 " | 105.00 | . . . . . | 155.00 |

The tie rod connections are designed to allow a moderate variation in the dimension M without bending rod.

The hinge plates will be drilled for bolting on wall without extra charge if drawing showing location of holes is supplied, otherwise plates will be left for purchaser to drill holes as required.



# Light Single I-Beam Travelers

**For use with Chain Blocks**

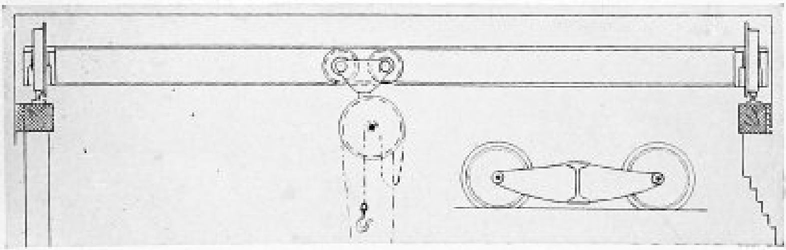
These travel on longitudinal tracks with a trolley for cross travel and enable the hoist to reach any part of the floor area included between the tracks. See also opposite page.

Suitable for warehouses, machine shops, foundries, stone yards, etc.

The head room required over top of rail is the same as the "drop of hanger" given on page 35 for steel channel runways.

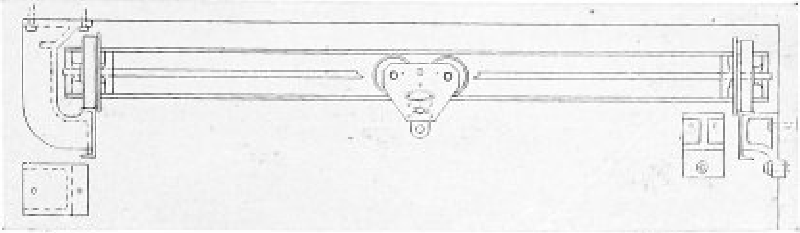
Prices include Brown Plain Steel Trolleys, but do not include Chain Blocks. See pages 10 and 11 for Triplex Blocks.

| Capacity in Tons | Price for 10 foot Span or less | Additional Price per foot up to 28 foot Span | Height of Track for Regular Hoist | Extra Hoist per foot of additional height | Net Weight | |
|---|---|---|---|---|---|---|
| | | | | | 10 foot Span | Approximate Weight for each extra foot |
| ¼ | $ 65.00 | $5.50 | 9 ft. 6 in. | $ .90 | 205 lbs. | 45 lbs. |
| ½ | 65.00 | 5.50 | 9 ft. 6 in. | .90 | 245 " | 50 " |
| 1 | 120.00 | 6.00 | 9 ft. 9 in. | .95 | 340 " | 60 " |
| 1½ | 150.00 | 7.00 | 10 ft. 0 in. | 1.00 | 675 " | 60 " |
| 2 | 180.00 | 8.00 | 11 ft. 6 in. | 1.05 | 700 " | 75 " |
| 3 | 210.00 | 10.00 | 13 ft. 2 in. | 1.50 | 1070 " | 100 " |



The end clearance required is 6 inches outside of the centre line of the rails.

In ordering give span from centre to centre of rails and show the section of the rail if the standard size given on page 35 is not used.



# Track and Fittings for Travelers

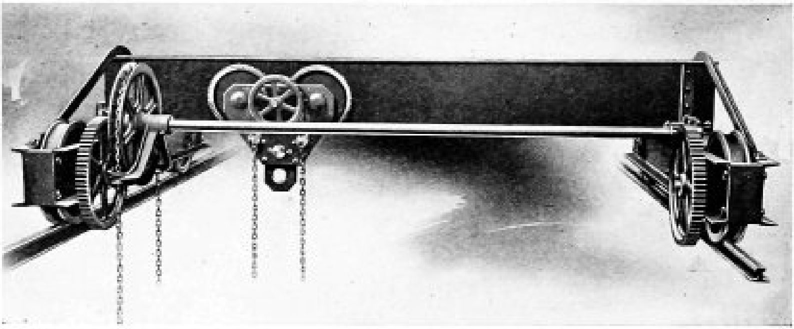
This usually consists of ordinary rail of light section secured to timber supports by means of spikes. The timbers carrying the track are commonly supported on posts or bolted to the walls. Where all steel construction is required steel channels may be used, supported on hangers or brackets attached to overhead trusses, walls or columns.

## Tee Rails for Timber Runways

| Capacity in Tons | ¼ | ½ | 1 | 1½ | 2 | 3 |
|---|---|---|---|---|---|---|
| Size of Tee Rail in ins. and lbs. | 2¼" x 16 | 2¼" x 16 | 2¼" x 16 | 2½" x 20 | 2½" x 20 | 2½" x 20 |
| Tee Rail per Foot Complete with Fish Plates and Spikes | $ .40 | $ .40 | $ .40 | $ .50 | $ .50 | $ .50 |
| Size of Yellow Pine Timber for Runway in Inches . . . | 6 x 6 | 6 x 6 | 6 x 8 | 8 x 8 | 8 x 10 | 10 x 10 |
| Greatest Distance Between Supports for Timbers . . . | 12 ft. | 10 ft. | 10 ft. | 10 ft. | 12 ft. | 12 ft. |

## Steel Channel Runways with Hangers and Wall Brackets

| Capacity in Tons | Span in Feet | Drop of Hanger in Inches | Price of Hanger | Price of Wall Brackets | Size of Channel for Track in ins. | Price of Channel per Foot | Greatest Distance between Supports | Price of Joints for Track |
|---|---|---|---|---|---|---|---|---|
| ¼ | Up to 22 | 11 | $ 6.00 | $ 5.75 | 6 | $ .65 | 10 ft. | $ 3.50 |
| ¼ | 22 to 28 | 17 | 7.00 | 5.75 | 6 | .65 | 10 " | 3.50 |
| ½ | Up to 18 | 11 | 6.00 | 5.75 | 7 | .75 | 10 " | 4.25 |
| ½ | 18 to 28 | 17 | 7.00 | 5.75 | 7 | .75 | 10 " | 4.25 |
| 1 | Up to 18 | 11 | 6.00 | 5.75 | 8 | .80 | 10 " | 4.75 |
| 1 | 18 to 28 | 17 | 7.00 | 5.75 | 8 | .80 | 10 " | 4.75 |
| 1½ | Up to 26 | 17 | 16.00 | 10.25 | 10 | 1.40 | 10 " | 6.00 |
| 1½ | 26 to 28 | 25 | 19.00 | 10.25 | 10 | 1.40 | 10 " | 6.00 |
| 2 | Up to 24 | 17 | 16.00 | 10.25 | 12 | 1.55 | 10 " | 7.25 |
| 2 | 24 to 28 | 25 | 19.00 | 10.25 | 12 | 1.55 | 10 " | 7.25 |
| 3 | Up to 20 | 17 | 16.00 | 10.25 | 15 | 2.30 | 14 " | 9.00 |
| 3 | 20 to 28 | 25 | 19.00 | 10.25 | 15 | 2.30 | 14 " | 9.00 |



Crane with Single I-Beam Bridge and Trolley

## "Brownhoist" Traveling Cranes

THESE Crane Bridges are for use with Triplex Blocks and Electric Hoists. The Bridge Trolleys may be plain, hand geared or motor driven. When electric travel of the bridge is required, a motor is geared to the truck wheels.

The general design, workmanship and quality of material, make a high grade equipment for moderate spans and capacities. All movements of these Cranes are controlled from the floor near the work. This dispenses with the services of a special Crane operator, who is required to sit in the cage at all times, with the cage controlled Crane.

When the Crane is controlled from the floor at a point near the work, more careful handling of material is possible, as the operator is near the load where he can watch it and not be required to depend on signals from the floor man.

In many cases, where it is required to serve a moderately busy bay, or where it is necessary to use two or three Cranes in a long bay, the bridge and trolley travel will be sufficiently rapid if performed by hand, leaving the hoisting to be done by power. A very satisfactory Crane of this type is obtained by using the Electric Hoist for lifting. Where hand lifting is ample, the Triplex Block may take the place of the Electric Hoist.

When equipped with electric power for traveling, these Cranes will be supplied with an operator's cage if desired.

This line of Cranes is steel construction throughout, and built with a liberal factor of safety. For moderate service, which does not require the use of high speed Cranes, these are the most economical equipments obtainable.

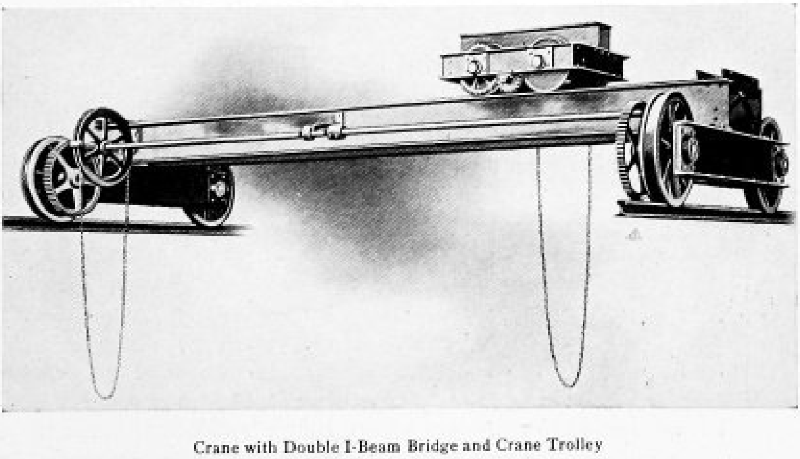
The truck wheels are of extra large size, which, with the easy running bearings, and light but strong bridges, make a hand-power equipment which will move heavy loads easily and rapidly along the runway.

The maximum span for these reinforced I-Beam Cranes is as follows:

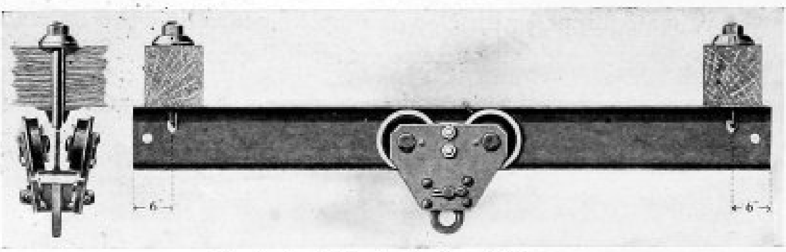
| | |
|---|---|
| 15 tons capacity or less | 40 ft. |
| 20 " " " " | 36 ft. |
| 30 " " " " | 26 ft. 6 in. |

Give us the height and width of the room or bay in which you propose to use a Crane and the conditions of the service, and we will advise you fully, giving clearances and other information, enabling you to provide for a suitable Crane.

**Dimensions and Prices on Request.**



Crane with Double I-Beam Bridge and Crane Trolley



Standard 12 foot Trolley Track and Fittings.

# Standard 12 Foot Trolley Tracks

These are complete with fittings, including "Brown" Trolley and 12 feet of I-beam track, with two Hanger Bolts for attaching to timbers 12 inches or less. These are also suitable for use on portable horses.

This affords a complete equipment for use over lathes and other machines, giving a ready and substantial means of handling material with absolute safety to work and operator. It is intended for stationary use, but can be easily fitted up by any mechanic for use as a light jib or swing crane, supported by a tie rod from wall or post.

It is supplied complete with key bolts ready for attaching to overhead timbers or trusses and can be erected as easily as a countershaft. Holes are drilled for stop bolts, to be supplied by customer.

| Capacity in Tons | Price complete *without* Chain Block | | | | Price complete *with* Triplex Chain Block, with regular length of hoist. | | | |
|---|---|---|---|---|---|---|---|---|
| | With Cast Iron Trolley | | With Steel Plate Trolley | | With Cast Iron Trolley | | With Steel Plate Trolley | |
| | Plain | With Roller Bearings | Plain | Geared | Plain | With Roller Bearings | Plain | Geared |
| ½ | $24.00 | ...... | $32.50 | ...... | $59.00 | ...... | $67.50 | ...... |
| 1 | 31.00 | $40.00 | 40.00 | $70.00 | 76.00 | $85.00 | 85.00 | $115.00 |
| 1½ | 35.00 | 42.50 | 52.50 | 77.50 | 95.00 | 102.50 | 112.50 | 137.50 |
| 2 | 45.00 | 50.00 | 60.00 | 85.00 | 115.00 | 120.00 | 130.00 | 155.00 |
| 3 | ...... | ...... | 75.00 | 95.00 | ...... | ...... | 155.00 | 175.00 |
| 4 | ...... | ...... | 90.00 | 130.00 | ...... | ...... | 185.00 | 225.00 |
| 5 | ...... | ...... | 115.00 | 145.00 | ...... | ...... | 235.00 | 265.00 |
| 6 | ...... | ...... | 160.00 | 200.00 | ...... | ...... | 305.00 | 345.00 |
| 8 | ...... | ...... | 200.00 | 230.00 | ...... | ...... | 375.00 | 405.00 |
| 10 | ...... | ...... | 225.00 | 265.00 | ...... | ...... | 440.00 | 480.00 |

Prices for longer lengths of track and additional fittings are given on page 41

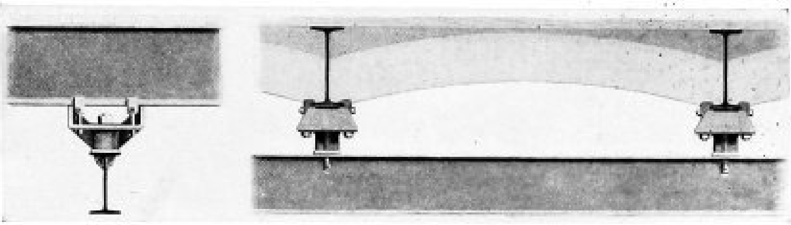


Fig. 1. Cast Iron Clip Hangers for steel construction

# Overhead I-Beam Track and Details

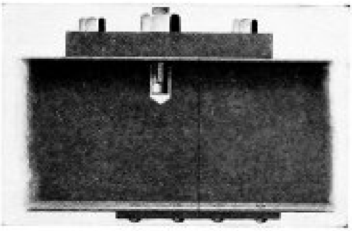


Fig. 2. Standard Steel Joint

The safest and most substantial form of overhead track consists of Standard steel I-beams. By the use of trolleys running on the lower flange of the beam, the head room occupied is as small as possible.

The supports may be placed at convenient distances not exceeding the greatest safe span given on page 30

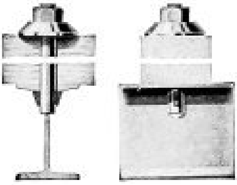


Fig. 3. Patent Hanger Bolts

The strength and lateral stiffness of this form of track is so great that few supports are required, making it the cheapest and easiest to erect.

I-Beam Track may be suspended by bolting directly to the timbers or by means of hanger bolts keyed to the I-beam as shown in Fig. 3, thus leaving the beam clear for the wheels to pass. For drop hangers, wrought "V" hangers may be used as in Fig. 4, or for attachments to I-beams, cast-iron hangers with clip-bolt fastenings as in Fig. 1.

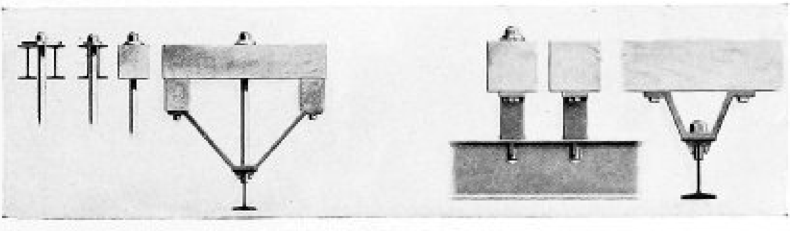


Fig. 4. Wrought V-Hangers

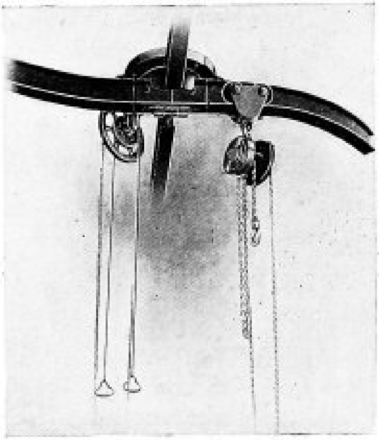


Fig. 5. Turntable

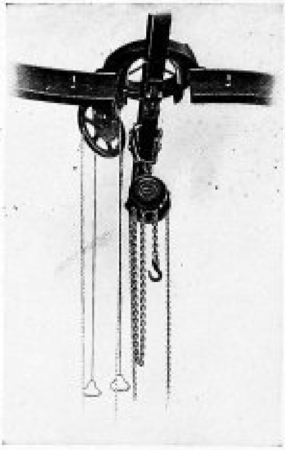


Fig. 6. Turntable in Second Position

*These Turntables and Switches* are operated from the floor by pendant chains, and are absolutely safe. The safety stops prevent the trolley running off the beam in any position of turntable or switch.

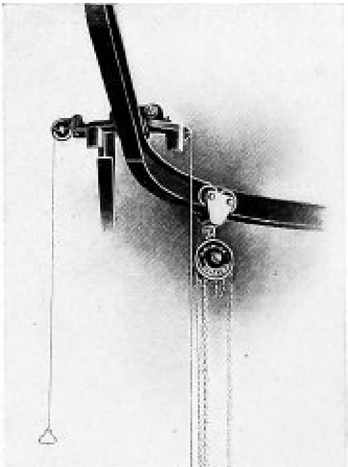


Fig. 7. Two-way Switch

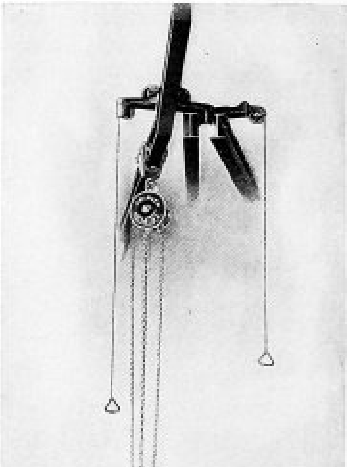


Fig. 8. Three-way Switch

*Complete overhead Tramrail Systems* can be furnished machined and fitted ready for erection by any ordinary mechanic, when drawings or rough sketches are supplied showing fully the means of overhead supports and obstructions to be cleared.

Complete prices are given in the following list and we will furnish estimates based thereon, if full information with correct drawings are sent.

| CAPACITY in Tons | | ¼ | ½ | 1 | 1½ | 2 | 3 | 4 | 5 | 6 | 8 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size I-Beam in Inches | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 15 | 20 | 24 |
| Rail, Price per Foot | | $ .60 | .80 | 1.00 | 1.15 | 1.30 | 1.70 | 2.10 | 2.45 | 2.90 | 4.35 | 5.65 |
| Distance between Supports, in Feet | | 13 | 14 | 13 | 13 | 13 | 13 | 13 | 15 | 18 | 25 | 27½ |
| Curves, Price for Bending* | | $4.50 | 5.00 | 5.75 | 6.75 | 6.75 | 7.75 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 |
| Hanger Bolt 12 inches long. Fig. 3, Page 39 | | $1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.75 | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 |
| For each 3 inches additional add | | $ .05 | .05 | .05 | .05 | .10 | .10 | .10 | .10 | .15 | .15 | .25 |
| "V" Hangers, with Lag Screws and Key Bolts 12 in. drop. Fig. 4, Page 39 | | $6.25 | 6.50 | 7.75 | 8.75 | 9.00 | 10.50 | 10.75 | 12.50 | 14.00 | 15.50 | 17.00 |
| For each 3 inches additional add | | $ .25 | .25 | .25 | .25 | .25 | .25 | .50 | .50 | .50 | .75 | .75 |
| Clip Hangers, with Bolts. 12 inch Drop Fig. 1, Page 39 | | $9.00 | 9.50 | 9.75 | 11.00 | 11.25 | 12.75 | 14.00 | 15.50 | 17.00 | 18.50 | 20.00 |
| For each 3 inches additional add | | $ .25 | .25 | .25 | .50 | .50 | .50 | .75 | .75 | 1.00 | 1.00 | 1.00 |
| Steel Joints, Complete. Fig. 2, Page 39 | | $6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 13.00 | 15.00 | 18.00 | 20.00 | 22.00 |
| Two-way Switches, Complete with Chains † Fig. 7, Page 40 | ‡A | $50.00 | 55.00 | 60.00 | 65.00 | 75.00 | 80.00 | 120.00 | 130.00 | 270.00 | 290.00 | 310.00 |
| | B | . . . | 70.00 | 70.00 | 80.00 | 90.00 | 105.00 | 120.00 | 130.00 | 270.00 | 290.00 | 310.00 |
| | C | . . . | 60.00 | 70.00 | 80.00 | 270.00 | 270.00 | 270.00 | 270.00 | 270.00 | 290.00 | 310.00 |
| Three-way Switches, Complete with Chains† Fig. 8, Page 40 | A | 65.00 | 70.00 | 75.00 | 80.00 | 90.00 | 110.00 | 200.00 | 210.00 | 300.00 | 320.00 | 340.00 |
| | B | . . . | 100.00 | 100.00 | 110.00 | 120.00 | 190.00 | 200.00 | 210.00 | 300.00 | 320.00 | 340.00 |
| | C | . . . | 75.00 | 100.00 | 110.00 | 300.00 | 300.00 | 300.00 | 300.00 | 300.00 | 320.00 | 340.00 |
| Turn-tables, Complete with Chains, Figs. 5 and 6, Pages 40 | A | 80.00 | 90.00 | 110.00 | 125.00 | 145.00 | 180.00 | 210.00 | 240.00 | 640.00 | 680.00 | 720.00 |
| | B | . . . | 90.00 | 110.00 | 125.00 | 145.00 | 180.00 | 210.00 | 240.00 | 640.00 | 680.00 | 720.00 |
| | C | . . . | 105.00 | 120.00 | 135.00 | 145.00 | . . | . . | . . | . . | . . | . . |

*The price for each curve is charged for each 90 degrees of curvature or fraction thereof and is additional to the price of the I-beam used.

†Price does not include the I-beam.

‡A—For use with Plain Steel Plate Trolley only. B—For use with Geared Steel Plate Trolley, page 27. C—For use with Triplex Trolley Blocks, page 29. All Trolleys for use with Turntables require Special Locking Device which must be specified when the Trolley is ordered.

For shipment of tracks in less than carload lots, steel joints should be so spaced as to make the lengths 20 feet or less for box cars and 30 feet for flat cars.

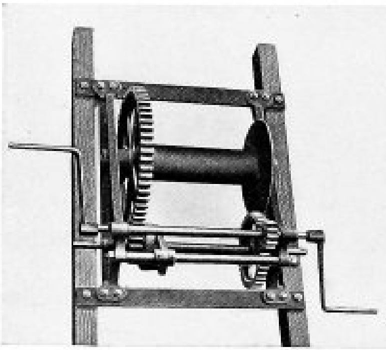
Four hanger bolts or hangers are required for each turntable or double switch, and three for each single switch.

# Safety Crabs and Derrick Winches

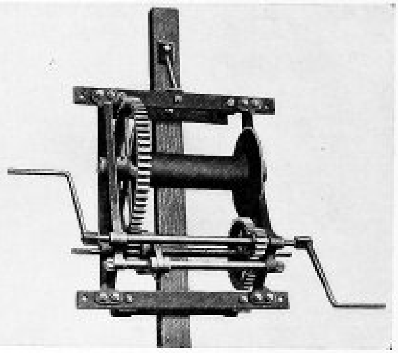
**These are provided with automatic safety brakes. Dropping of the load is impossible and the handles cannot fly back, thus removing all danger so that a boy can lower safely.**

Safety Crabs and Winches can be furnished with sprocket wheels for hand rope or chain instead of cranks, or capstan barrel in place of straight barrel, without extra charge. They can also be furnished with large drums or with capstan end on lower barrel shaft at extra cost.

A strap brake for quick lowering can be furnished on any of the three larger sizes as indicated, but is never used on the one-half-ton machines. Except on the smallest size two speeds are provided and the fast speed can always be used for safety lowering.



Safety Winch for Double Pole.



Safety Winch with Single Pole Attachments. Extra cost $7.00

The attachments for Double Pole will always be furnished unless otherwise ordered.

## Derrick Winches

| Code Word | Number of Winch | Size of Regular Barrels | | Capacity with Double Blocks in Tons* | Price Double Pole | Add for each additional six inches in length of barrel | Add for Strap Brake | Weight Standard Winch |
|---|---|---|---|---|---|---|---|---|
| | | Diam. | Length | | | | | |
| Gaterais .... | 31 | 4½ in. | 12 in. | 1½ | $65.00 | $ 7.00 | None. | 220 lbs. |
| Gatterstab... | 32 | 5 " | 16 " | 3 | 75.00 | 8.00 | $27.00 | 400 " |
| Gaucourte ... | 33 | 6 " | 20 " | 4½ | 90.00 | 10.00 | 27.00 | 580 " |
| Gaudiosa,.... | 35 | 7 " | 24 " | 7½ | 130.00 | 14.00 | 27.00 | 860 " |
| Gaultheria .. | Single Pole Winch. | | | $7 additional to above price. | | | | |

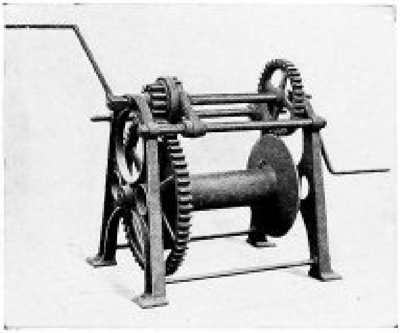
*The safe load on single rope direct on the barrel is one-third of that given above, 33⅓ per cent. being allowed for the friction of the double sheave block and tackle.

An extra charge of $1.50 net will be made when boxing for export is required.

# "Brownhoist" Safety Crabs & Derrick Winches

**Made under Weston's Patent**

These have a safety lowering device which operates automatically. The load is always self-sustained and cannot run down under any condition. The flying back of the handles is absolutely prevented, and the safety of the operator and of the load is always assured. Lowering is effected by simply turning the cranks backward under light pressure, leaving the safety pawl in gear to control the load.



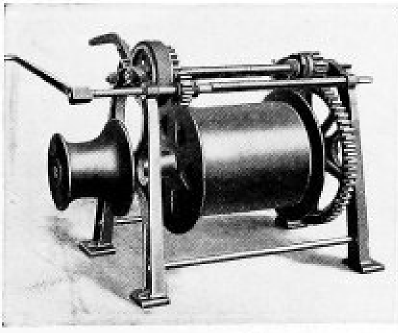
Safety Crab

## Safety Crabs

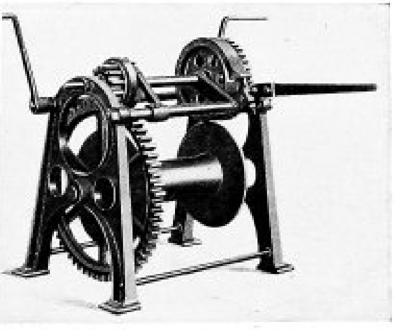
| Code Word | No. of Crab | Size of Regular Barrels | | Capacity with Double Blocks in Tons* | Price | Add for each additional six inches in length of barrel | Add for Strap Brake | Regular Weight |
|---|---|---|---|---|---|---|---|---|
| | | Diam. in ins. | Length in ins. | | | | | |
| Gasparin . | 21 | 4½ | 12 | 1½ | $ 65.00 | $ 7.00 | None | 230 lbs. |
| Gossoul . . | 22 | 5 | 16 | 3 | 75.00 | 8.00 | $27.00 | 370 " |
| Gasteripe . | 23 | 6 | 20 | 4½ | 90.00 | 10.00 | 27.00 | 520 " |
| Gastricism . | 25 | 7 | 24 | 7½ | 130.00 | 14.00 | 27.00 | 810 " |

*The safe load on single rope direct on the barrel is one-third of that given above, 33⅓ per cent. being allowed for the friction of the double sheave block and tackle.

An extra charge of $2.00 net will be made when boxing for export is required.

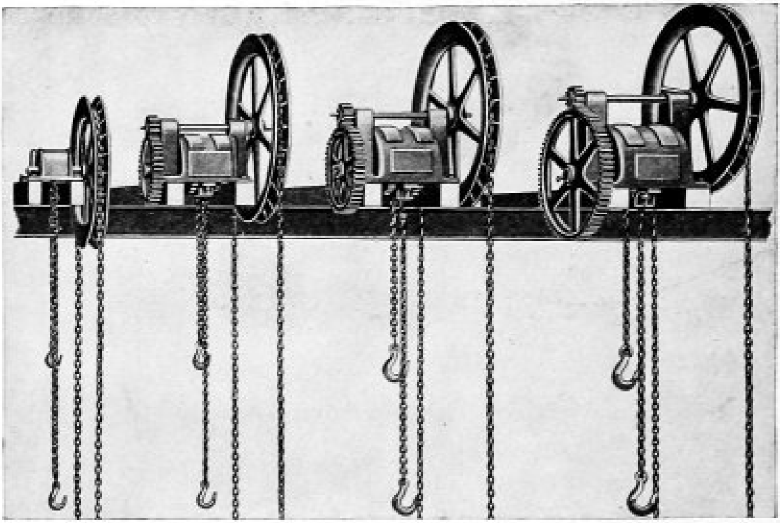


Special Safety Crab
Equipped with Strap Brake, Large Diameter Drum and Capstan Head

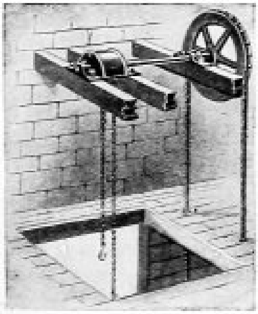


Safety Crab
With Strap Brake

# The Safety Double Lift Hoist



Five Hundred One Thousand Fifteen Hundred Two Thousand



A safe, simple and cheap machine for quick handling of bulky loads, work over hatchways, etc. The load may be attached to *either hook*, so that one of them is always in position ready for use.

For Hand Elevators a counterweight may be attached to one hook and the chain led over guide sheaves as shown on page 45 for the Triplex Winch.

Price of each guide sheave complete with bearings, $4.50.

Speed of 500 pound Hoist, 16 feet per minute.
" 1000 " " 7 " "
" 1500 " " 5 " "
" 2000 " " 3 " "

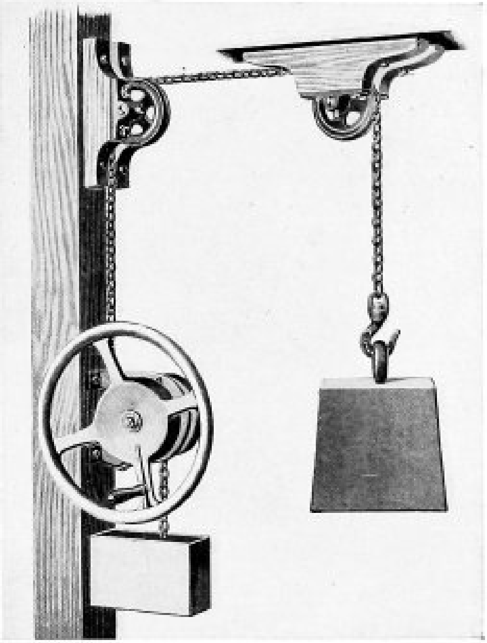
With light loads proportionally higher speeds can be obtained.

| Capacity in Pounds | Price Complete (except Hand-rope or Chain) | Hoist | Price for Extra Hoist per foot | Hand-rope or Chain extra | | Price Extra Length of Shaft. (Baquetazos) | | *Distance from center of Rope Wheel to center of Chain (Barbiclum) | Code Word |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rope | Chain | First Foot including bearing | Additional Foot | | |
| 500 | $ 31.00 | 16 ft. | $ .37½ | $3.75 | $6.25 | $2.50 | $ .95 | 4$\frac{7}{16}$ ins. | Barbicella |
| 1000 | 62.00 | 24 " | .40 | 5.00 | 8.75 | | | 8¾ " | Barbicina |
| 1500 | 81.00 | 28 " | .42½ | 5.60 | 10.00 | | | 9¼ " | Barbicola |
| 2000 | 100.00 | 32 " | .45 | 6.25 | 11.25 | | | 10¼ " | Barbicone |

*Figures are given for regular length of shaft. When extra length shafts are required, state distance desired from center of hoistway to a line connecting the two rope holes through the floor (which distance is the same as from center of rope-wheel to center of chain-sheave, as will be seen by reference to small cut.)

Unless otherwise ordered Lifts will be furnished with regular length of hoist, as shown by large picture, and without either hand-rope or hand chain. Rope is usually preferred and can be provided by any dealer.

# The Yale & Towne Triplex Winch



This consists of the mechanism of the Triplex Block arranged in the form of a Winch, and operated by a balance-wheel with crank handle.

This machine sustains the load automatically at any height, and lowering is effected by simply turning the wheel handle backward.

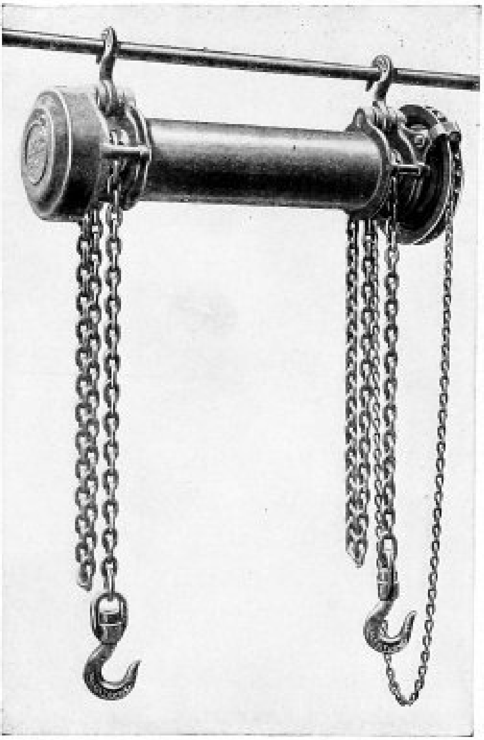
The balance-wheel permits of a smooth steady movement in both hoisting and lowering.

The Winch in accompanying illustration is shown with the load chain passing over two guide sheaves for vertical lifting. This arrangement is particularly adaptable to use over hatchways and on jibs. Any length of chain may be supplied.

The Winch is geared the same as the regular Triplex Block, but the 1,500 lb. Winch may be supplied with a special "Quick Speed" gearing, when ordered, geared 14 to 1 for rapid handling of light loads.

| Capacity in Lbs. | Price with 16 Foot Chain, Guide Sheaves Extra | Guide Sheave with Bearing Complete. Each | Extra Chain per Foot |
|---|---|---|---|
| 1500 | $50.00 | $4.50 | $ .45 |
| 3000 | 80.00 | 6.00 | .55 |

# Twin Hook Triplex Block



Twin Hook Triplex Block

This is a special form of the Yale & Towne Triplex Block designed for handling car bodies, core oven doors, for dipping in dyeing or galvanizing tanks and for handling any long material. The two load chains and hooks always move together being operated by the single hand chain at one end of the Block. It may be hung from a fixed support, from overhead trolleys or from a crane.

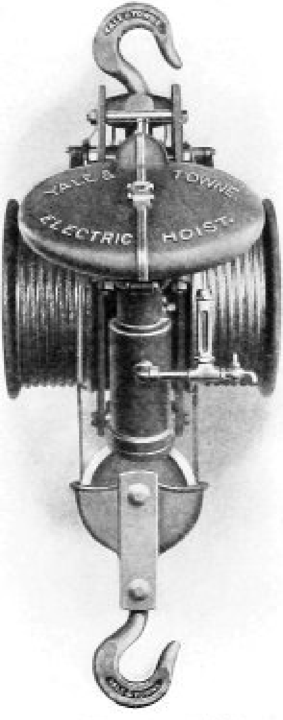
The Twin Hook Triplex Block is adapted to a wide variety of uses and saves the headroom required with other less steady hoisting appliances for handling long material.

| Capacity in Tons | Centre Distance between Hooks | | | | | | *Hoist in Feet | Extra Hoist Price per Foot |
|---|---|---|---|---|---|---|---|---|
| | 3 feet | 4 feet | 5 feet | 6 feet | 7 feet | 8 feet | | |
| ½ | $150.00 | $155.00 | $160.00 | $165.00 | $170.00 | $175.00 | 8 | $1.30 |
| 1 | 160.00 | 165.00 | 170.00 | 175.00 | 180.00 | 185.06 | 8 | 1.40 |
| 1½ | 170.00 | 175.00 | 180.00 | 185.00 | 190.00 | 195.00 | 8 | 1.50 |
| 2 | 200.00 | 205.00 | 210.00 | 215.00 | 230.00 | 225.00 | 9 | 1.60 |
| 3 | 220.00 | 225.00 | 230.00 | 235.00 | 240.00 | 245.00 | 10 | 2.50 |
| 4 | 250.00 | 255.00 | 260.00 | 265.00 | 270.00 | 275.00 | 10 | 2.70 |
| 5 | 300.00 | 305.00 | 310.00 | 315.00 | 320.00 | 325.00 | 12 | 3.80 |
| 6 | 350.00 | 355.00 | 360.00 | 365.00 | 370.00 | 375.00 | 12 | 3.80 |
| 8 | 410.00 | 415.00 | 420.00 | 425.00 | 430.00 | 435.00 | 12 | 4.90 |
| 10 | 490.00 | 495.00 | 500.00 | 505.00 | 510.00 | 515.00 | 12 | 6.00 |

*Figures denote height in feet which blocks with regular lengths of chain will hoist from level on which operator stands.

The sizes from 3 to 10 tons consists of two Triplex Blocks with double upper hooks coupled together and have 4 independent upper hooks.

# Electric Hoists



Yale & Towne Electric Hoist

Including the Electric Triplex Hoist and Trolleys for use with Electric Hoists.

# Electric Hoist

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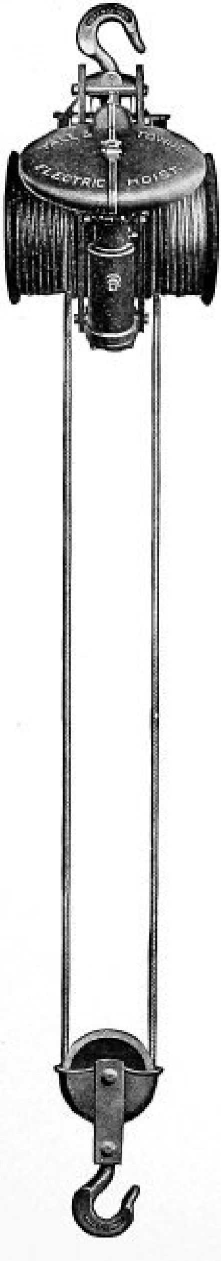


## Yale & Towne
# Electric Hoist

THE efficient handling system does not require a crane to neglect heavy work and hurry across the shop to take care of some small lift. The practical equipment includes electric cranes for heavy loads, electric hoists for constant lifting in serving machines or assembling, and small electric hoists or chain blocks for conveying small pieces, in all stages of manufacture.

The electric hoist is as important in the average shop as the heavy crane. A large number of lifts in a short time, by manual labor is an expensive item.

Electric hoists are economical, even when substituted for the cheapest labor. They are in a class midway between chain blocks and heavy duty traveling cranes, giving from five to ten times the speed of hand hoists and costing only the fractional part of electric traveling cranes. An electrical hoist will operate continuously all day, on from 15 to 40 cents worth of power.

Any shop can install overhead handling systems of I-beam track or swinging jib cranes. The cost is moderate and the head-room limited. Supplementary small hoists increase 50% or more the efficiency of the heavy cranes.

A further application is the use of electric hoists on traveling cranes where all movements are controlled from the floor. If the lifting is performed by power, the racking movements for many kinds of work are amply fast and convenient by hand. This saves a special crane operator and enables more careful handling on account of the workman being down near the load, where he can make the closest adjustments.

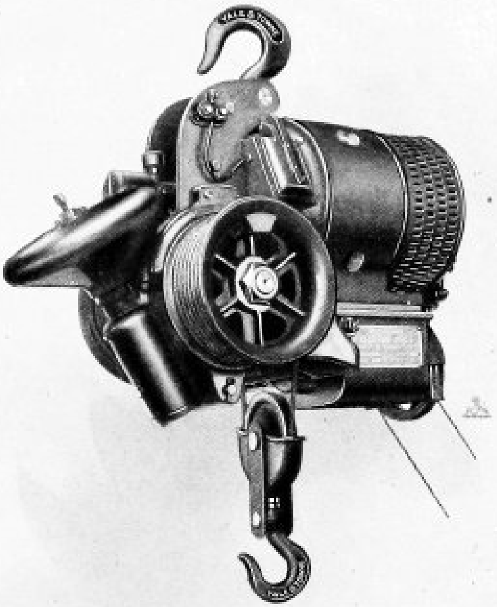
Yale & Towne Electric Hoists are high-grade machines, designed to give uninterrupted service, and operate at a minimum cost. The hoist consists of two winding drums, hung in steel suspension plates and driven by a direct current crane motor, of high power. The controller is of the latest approved type and is provided with a large number of contacts arranged to give gradual speed acceleration. All parts are easily accessible. Any workman of ordinary intelligence can operate it. Installation involves simply hooking up the hoist and connecting two wires for current.

The greatest care is exercised in the design and manufacture of the hoisting gear. This must at all times be depended upon to protect the lives of workmen and handle costly material. These gear parts are made as simple as possible and are exceptionally strong and durable. The hoisting gear is arranged to hold the load, even should the armature brake be entirely removed. It is impossible to drop the load.

All parts are enclosed as protection against heat, dust and moisture. Safety receives the first consideration, next simplicity and durability.

High-grade electric hoists will save their cost several times every year in economy and speed and in preventing interruption in the regular movement of product.

*State your class of handling and write for illustrations showing what other people are doing with Yale & Towne Electric Hoists.*

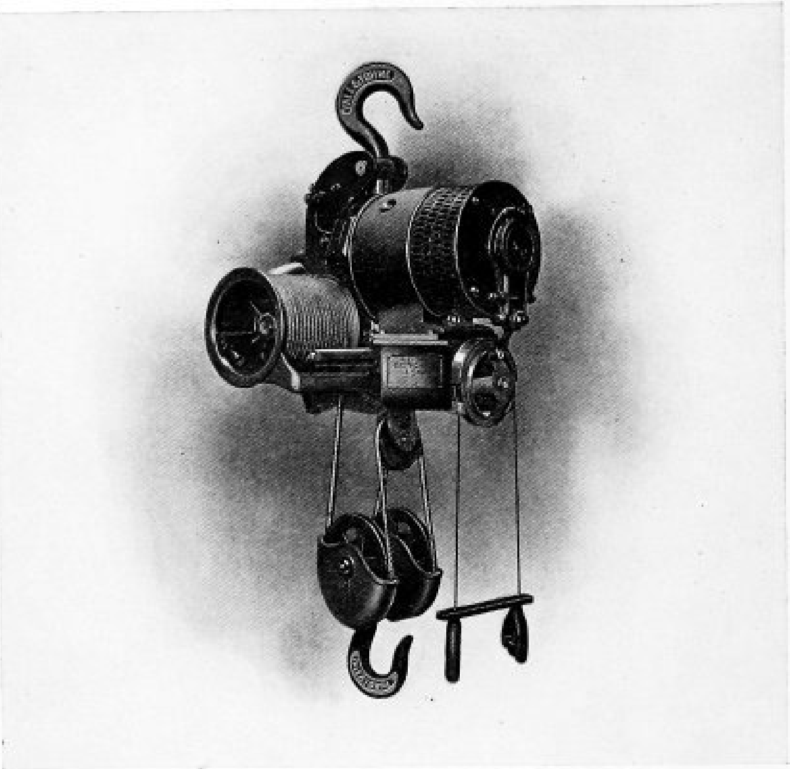


# Yale & Towne 1 and 2 Ton, 3 h.p. Electric Hoist

This Hoist supports the load on two parts of hoisting rope. The Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils are provided and automatic stops are on hoisting and lowering limits of hook travel. The gear runs in a bath of oil, and the journals are equipped with compression grease cups. For direct current 110 to 650 volts. Clearance dimensions page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute | | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| | | Loaded | Light | | | | |
| 1 | 3 | 20 | 25 | 10 feet | 40 inches | 640 lbs. | $475.00 |
| 2 | 3 | 15 | 25 | 10 " | 40 " | 640 " | 475.00 |

*Extra Lift: Long drums for lift up to 45 feet, $25.00 extra.
Foundry Controller: Special graduated speed controllers (five hoisting and four lowering speeds), $75.00 extra.

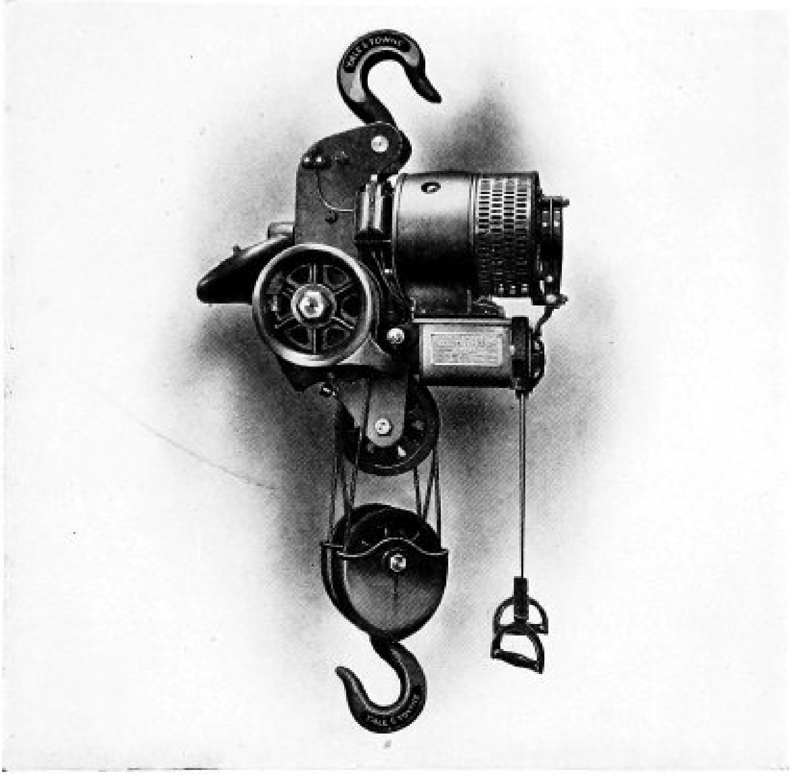


## Yale & Towne 4 Ton, 3 h.p. Electric Hoist

This Hoist supports the load on four parts of hoisting rope. Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils are provided and automatic stops are on hoisting and lowering limits of hook travel. The gear runs in a bath of oil and the journals are equipped with compression grease cups. Electrical parts are interchangeable with 1, 2 and 6 ton 3 h.p. hoists. For direct current 110 to 650 volts. Clearance dimensions given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute | | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| | | Loaded | Light | | | | |
| 4 | 3 | 7 | 14 | 10 feet | 53 inches | 820 lbs. | $485.00 |

*Extra Lift: Long drums for lifts up to 22 feet, $25.00 extra.
Foundry Controller: Special graduated speed controllers (five hoisting and four lowering speeds), $75.00 extra.

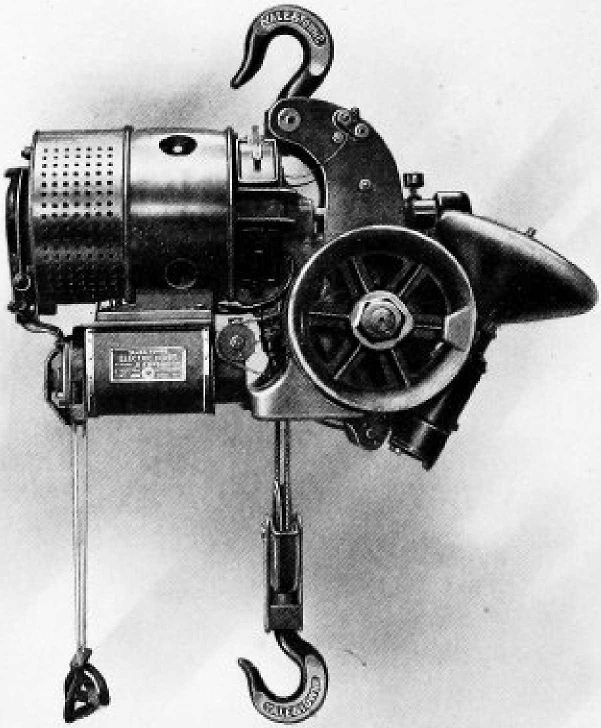


## Yale & Towne 6 Ton, 3 h.p. Electric Hoist

This Hoist supports the load on six parts of hoisting rope. The Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils are provided and automatic stops are on hoisting and lowering limits of hook travel. The gear runs in a bath of oil and the journals are equipped with compression grease cups. Electrical parts are interchangeable with the 1, 2 and 4 ton 3 h.p. Hoists. For direct current, 110 to 650 volts. Clearance dimensions are given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute | | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift. |
|---|---|---|---|---|---|---|---|
| | | Loaded | Light | | | | |
| 6 | 3 | 5 | 9 | 10 feet | 62 inches | 870 lbs. | $500.00 |

*Extra Lift: Long drums for lifts up to 15 feet maximum, $40.00 extra.
Foundry Controller: Special graduated speed controllers (five hoisting and four lowering speeds) $75.00 extra.

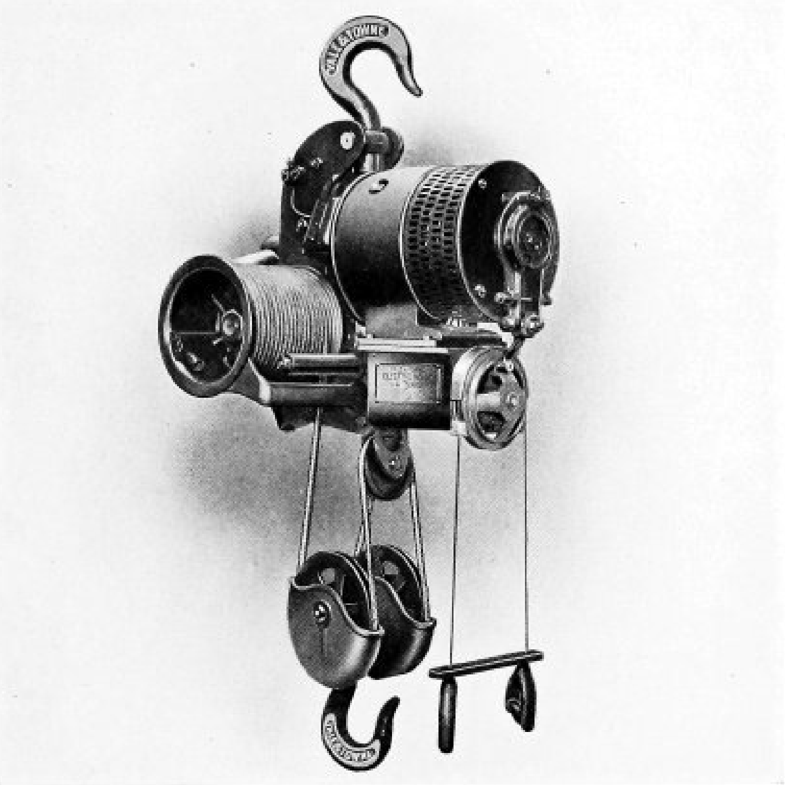


## Yale & Towne 5 Ton, 7 h.p. Electric Hoist

This Hoist supports the load on two parts of hoisting rope. The Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils are provided and automatic stops are on hoisting and lowering limits of hook travel. The gear runs in a bath of oil and the journals are equipped with compression grease cups. Electrical parts are interchangeable with the 10 and 15 ton 7 h.p. Hoists. For direct current 110 to 650 volts. Clearance dimensions are given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute Loaded | Speed, Feet per Minute Light | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| 5 | 7 | 15 | 25 | 10 feet | 61 inches | 1560 lbs. | $900.00 |

*Extra Lift: Long drums for lift up to 45 feet, $50,00 extra.
Foundry Controller: Special graduated speed controller (five hoisting and four lowering speeds), $75.00 extra.

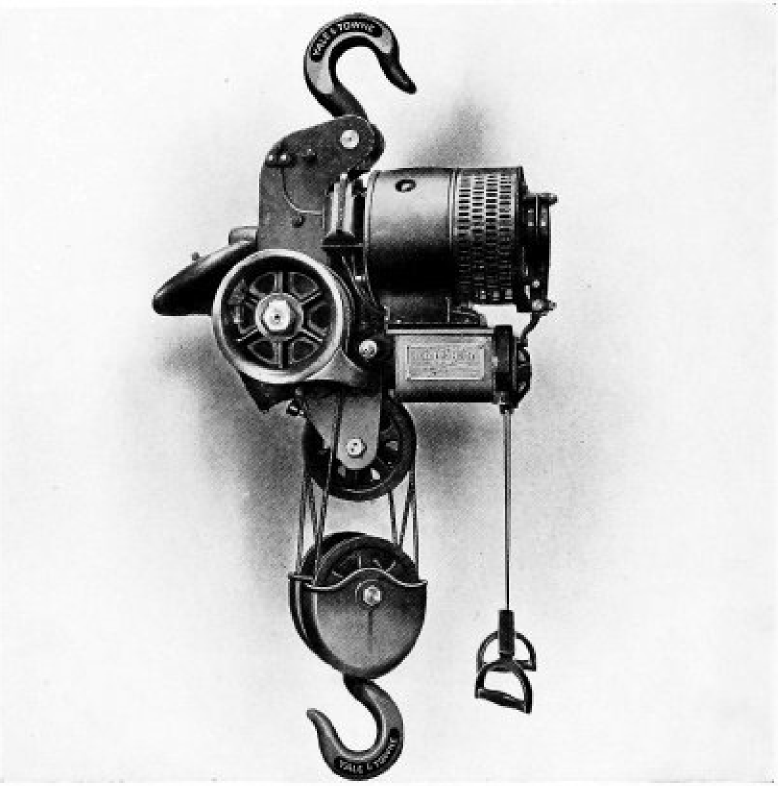


# Yale & Towne 10 Ton, 7 h.p. Electric Hoist

This Hoist supports the load on four parts of hoisting rope. The Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils are provided and automatic stops are on hoisting and lowering limits of hook travel. The gear runs in a bath of oil and the journals are equipped with compression grease cups. The electrical parts are interchangeable with the 5 and 15 ton 7 h.p. Hoists. For direct current 110 to 650 volts. Clearance dimensions are given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute | | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| | | Loaded | Light | | | | |
| 10 | 7 | 7 | 14 | 10 feet | 78 inches | 1800 lbs. | $1000.00 |

*Extra Lift: Long drums for lifts up to 22 feet, $50.00 extra.
Foundry Controller: Special graduated speed controller (five hoisting and four lowering speeds), $75.00 extra.



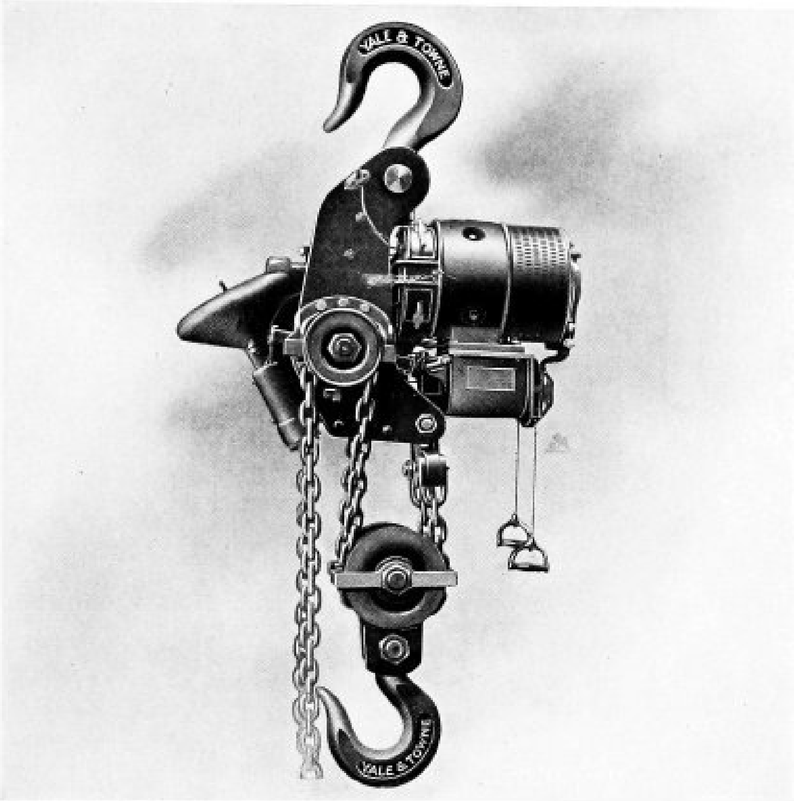
# Yale & Towne 15 Ton, 7 h.p. Electric Hoist

This Hoist supports the load on six parts of hoisting rope. The Rheostat is fan cooled, controller is provided with a large number of contacts arranged to give gradual speed acceleration. Magnetic blow-out coils and automatic safety stops are provided. The gear runs in a bath of oil and the journals are equipped with compression grease cups. The electrical parts are interchangeable with the 5 and 10 ton 7 h.p. Hoists. For direct current 110 to 650 volts. Clearance dimensions are given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed, Feet per Minute | | Regular Lift* | Minimum Distance Between Hooks | Weight | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| | | Loaded | Light | | | | |
| 15 | 7 | 5 | 9 | 10 feet | 99 inches | 2000 lbs. | $1200.00 |

*Extra Lift: Long drums for use up to 15 feet, $50.00 extra.

Foundry Controller: Special graduated speed controller (five hoisting and four lowering speeds). $75.00 extra.



## Yale & Towne Electric Chain Hoist

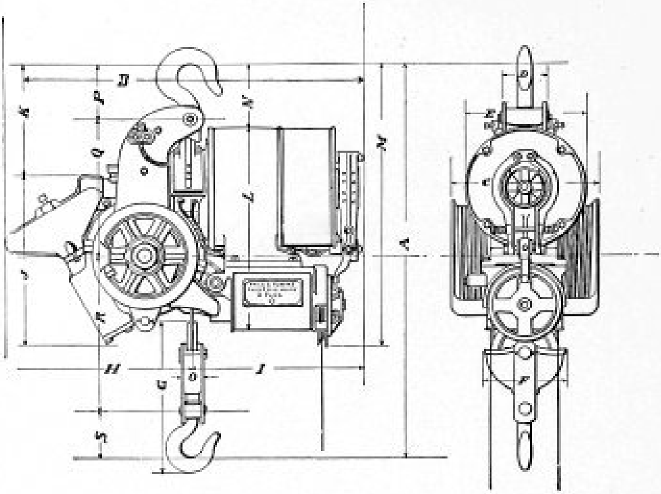
**For direct current 110 to 650 volts.**

This Hoist has the same motors and controllers as the wire rope hoists. The height of lift is governed only by the length of chain supplied. The sheaves and chain are easily accessible for renewal, thereby prolonging the life of the hoist indefinitely.

Clearance dimensions given on page 58.

| Capacity in Tons | Nominal H. P. of Motors | Speed per Minute | Regular Lift | Minimum Distance Between Hooks | Weight | Extra Lift Price per Foot | Price 10 ft. Lift |
|---|---|---|---|---|---|---|---|
| 8 | 3 | 3½ feet | 10 feet | 52 inches | 886 lbs. | $3.00 | $650.00 |
| 16 | 7 | 3½ " | 10 " | 88 " | 2300 " | 5.00 | 1400.00 |

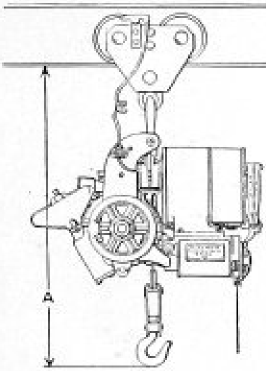
Foundry Controller: Special graduated speed controller (five hoisting and four lowering speeds), $75.00 extra.



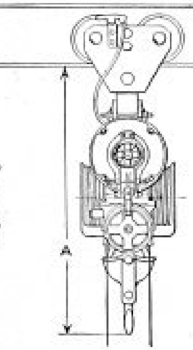
## Clearance Dimensions of Yale & Towne Electric Hoists with Single Top Hooks

| Capacity | DIMENSIONS IN INCHES | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | *C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
| 2 Ton . . . . . | 41¾ | 39 | 16¼ | 4⅝ | 13 | 8¾ | 16¼ | 20¼ | 18¾ | 18¼ | 11⅝ | 21⅞ | 30 5/16 | 6¾ | 2⅝ | 5 15/16 | 14 15/16 | 16¼ | 4⅜ |
| 4 Ton . . . . . | 52¾ | 39 | 21⅜ | 4⅝ | 13 | 12 | 18⅞ | 20¾ | 18⅜ | 18¼ | 15⅛ | 21⅞ | 33 5/16 | 10⅜ | 10 | 7¾ | 16⅛ | 21 13/16 | 6 13/16 |
| 6 Ton . . . . . | 64 | 39 | 21⅝ | 4⅝ | 13 | 12 | 21⅞ | 20¾ | 18⅜ | 18⅜ | 16 15/16 | 21⅞ | 35⅛ | 11 15/16 | 10 3/16 | 9 5/16 | 16⅜ | 30 11/16 | 7¾ |
| 5 Ton . . . . . | 61 | 58½ | 20¼ | 7 | 17⅜ | 12¼ | 24 1/16 | 30⅜ | 27¾ | 27 13/16 | 16⅜ | 28⅜ | 39⅜ | 9 13/16 | 3⅝ | 9¼ | 20 | 23 5/16 | 7 13/16 |
| 10 Ton . . . . . | 78 | 58½ | 25¾ | 7 | 17⅜ | 17⅝ | 28 13/16 | 30¾ | 27¾ | 27 13/16 | 22 13/16 | 28⅜ | 45 13/16 | 16¼ | 14⅛ | 12 15/16 | 23 | 30 15/16 | 11¾ |
| 15 Ton . . . . . | 99 | 58½ | 25¾ | 7 | 17⅜ | 17⅝ | 33 5/16 | 30¾ | 27¾ | 27 13/16 | 26 13/16 | 28⅜ | 49 13/16 | 20¼ | 17⅝ | 16 5/16 | 23⅜ | 42⅛ | 14 3/16 |
| 8 Ton . . . . .<br>3 h.p. Chain | 61 | 39 | 15 | 5¼ | 13 | 12⅝ | 23 7/16 | 20¼ | 18⅜ | 18¼ | 30 5/16 | 21⅞ | 38¼ | 15 1/16 | 13¼ | 11 7/16 | 17¼ | 23¼ | 8 13/16 |
| 16 Ton . . . . .<br>7 h.p. Chain | 88 | 58½ | 20 | 7¼ | 17¾ | 15¾ | 37⅞ | 30¾ | 27⅞ | 27 15/16 | 28¼ | 28⅞ | 51¼ | 21 11/16 | 23¼ | 17¾ | 24 | 30 13/16 | 15 13/16 |

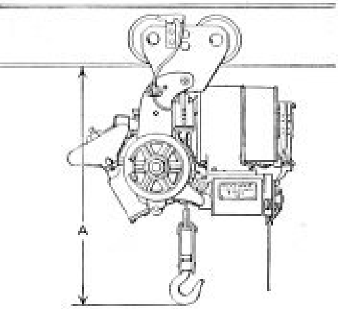
| *Dimensions C | 2 Ton. | 4 Ton. | 6 Ton. | 5 Ton. | 10 Ton. | 15 Ton. |
|---|---|---|---|---|---|---|
| 10 ft. Lift | 16¼ in. | 21⅜ in. | 21⅝ in. | 20¼ in. | 25¾ in. | 25¾ in. |
| 15 " | 16¼ " | 21⅜ " | 27⅜ " | 20¼ " | 25¾ " | 29¾ " |
| 22 " | 21⅝ " | 27⅜ " | . . | 25¾ " | 29¾ " | . . . |
| 30 " | 21⅝ " | . . . | . . . | 25¾ " | . . . | . . . |
| 45 " | 27⅜ " | . . . | . . . | 29¾ " | . . . | . . . |



Hooked in



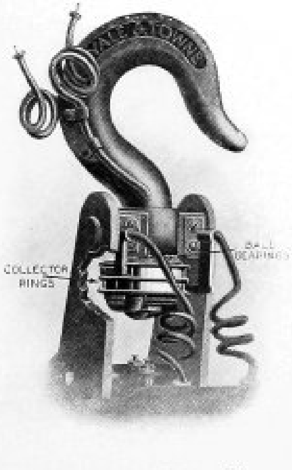
Clevis



Built in

## Head Room of Y. & T. Electric Hoists with Trolleys

| All Dimensions are Approximate | With Wire Rope. Dimension A. In Inches. | | | | | | | With Chain. Dimension A. In Inches. | |
|---|---|---|---|---|---|---|---|---|---|
| Capacity in Tons . . . | 1 | 2 | 4 | 5 | 6 | 10 | 15 | 8 | 16 |
| Hooked in Trolley . . . | 46 | 47 | 61 | 69 | 72 | 89 | 115 | 64 | 104 |
| Clevis to Trolley . . . . | 44 | 44 | 52 | 60 | 63 | 79 | 95 | 57 | 86 |
| Built in Trolley . . . . | 38 | 39 | 49 | 57 | 59 | 70 | | | |



Top Hook with Collector Rings

### Collector Rings on Top Hook:

This is a special appliance to prevent twisting the feed wires around the hook shank when the hoist is required to swivel more than a full turn.

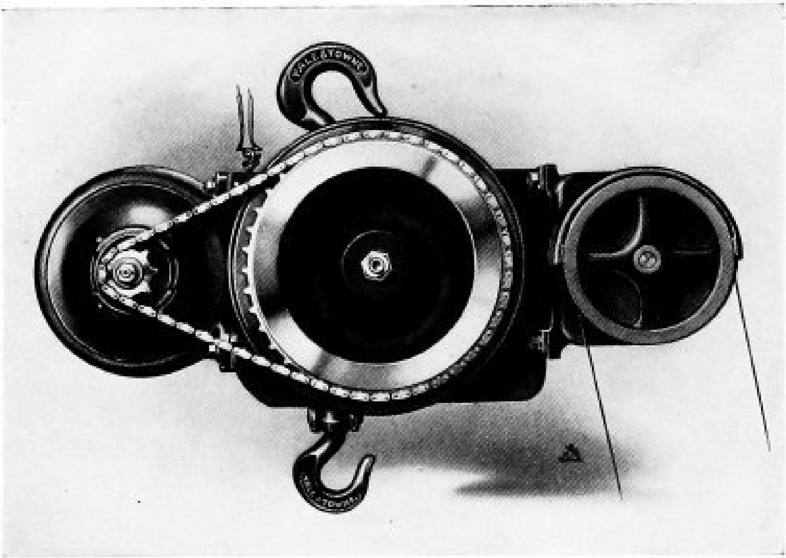
Price, 1 to 6 tons only, $25.00.

### Solenoid Brake:

This is required only when the controller is placed apart from the hoist.

Price for Brake and Limit Switch,

| | | |
|---|---|---|
| For 3 h.p. Hoist, | - | $90.00 |
| " 7 " " | - | 125.00 |



Yale & Towne Electric Triplex Hoist

A Power Hoist Reduced to its Simplest Terms

This is a new addition to the hoist family. It solves the problem of short, frequent lifts of 50 to 2000 lbs. It is light, compact and simple, may be hooked to any overhead support and requires little headroom.

For serving machine tools, running on trolley tracks, attaching to small travelling cranes, lashing to shear poles, or temporary rigs, this Hoist takes the place of a chain block at moderate additional cost, and gives from five to ten times the speed.

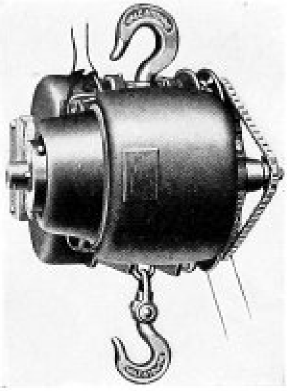
A test consisted of raising a 1 ton load 10 feet high, and lowering for 40 operations, within a period of two hours.

The Hoist consists of the Triplex Block, driven by a motor. When power is not available it may be operated by hand.

The working parts are interchangeable with the regular Triplex Block, making the question of repairs and renewal of gear parts, a simple and inexpensive matter. Triplex Chain Block parts of double the rated capacity are used to insure long life for power service.

The motor is series wound, ruggedly constructed, and suitable for the varying loads and speeds in hoisting work. The balanced train of spur gearing, insures high efficiency and consequent satisfactory speeds at minimum current consumption. The load is sustained positively by a Weston brake, with silent pawl.

The installation involves simply hooking up and attaching two wires for current. The controller is operated by two pendant cords.



End View

## Speeds of the 1 Ton Size Electric Triplex Hoist

| Load Carried | Hoisting Speed | Lowering Speed |
|---|---|---|
| 0 lbs. | 40 ft. per min. | 40 ft. per min. |
| 300 " | 26 " " " | 39 " " " |
| 900 " | 19 " " " | 36 " " " |
| 2000 " | 12 " " " | 26 " " " |

This Hoist is in a class half way between the Triplex Chain Block and the heavy duty Y. & T. Electric Hoists.

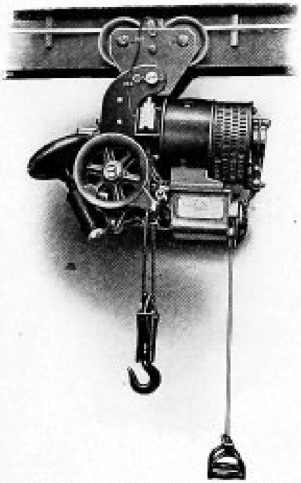
It will be supplied for any voltage, direct current.

## Electric Triplex Hoists, ½ and 1 Ton

| Capacity | Dimensions | | | Weight | Price | |
|---|---|---|---|---|---|---|
| | Min. Dist. between Hooks | Overall Width | Overall Length | | Extra Lift per Foot | Hoist with 10 ft. Lift |
| ½ Ton | 18 in. | 17 in. | 32 in. | 250 lbs. | $0.80 | $225.00 |
| 1 " | 22 " | 18 " | 35 " | 400 " | 0.90 | 300.00 |

# "Brown Hoist" Steel Trolleys for Yale & Towne Electric Hoists

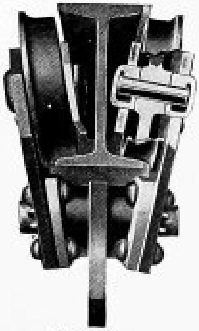
**See pages 26 to 32 for trolleys without current collectors**



Electric Hoist built in Plain Steel Trolley. Conductor Bars are shown.

Horizontal travel is obtained by trolleys to run on a track or crane. Standard "I-Beam" affords the most substantial and rigid form of track, enabling long spans without intermediate supports. It is suitable for attaching direct to the underside of roof girders, saving valuable headroom. Curves, switches, turntables and lateral spurs may be introduced to make a complete net work of tracks. The "I-Beam" is easily equipped with conductors for conveying current.

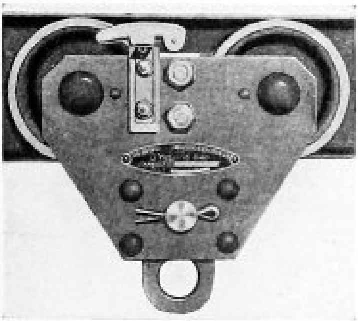
Where the lateral travel is short or the load light, a plain trolley may be used. Where a heavier load is required to be traversed, a Geared Trolley should be used. Where material is conveyed for long distances at great speed, the Motor Driven Trolleys should be used. These may also have cages attached so that the operator rides for long distances or over obstructions.

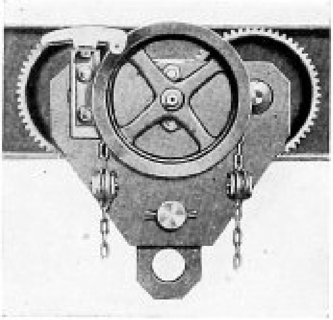


End View

Brown Steel Trolleys have wheels nearly as large in diameter as the depth of the "I-Beam." This facilitates easy travel and insures long wear. These trolleys have steel side plates and supplementary inner bearing plates, so that each wheel axle is supported at each end in a special bronze self-oiling bearing. The two halves of the trolley are connected by a pin, permitting a slight movement, so that all four wheels adjust themselves to any irregularities in the track. This always distributes the load on all the wheels.

One man will move a 1 ton load on a Plain Trolley by pushing 47 pounds; a 2 ton load at a push of 74 pounds. With the Geared Trolley he will traverse a 3 ton load along the track, by pulling 33 pounds on the hand chain. A fully loaded 10 ton Geared Trolley requires a hand chain pull of only 54 pounds to traverse the load along the track.


Plain Trolley (1 to 10 ton Model)


Hand-geared Trolley (1 to 10 ton Model)

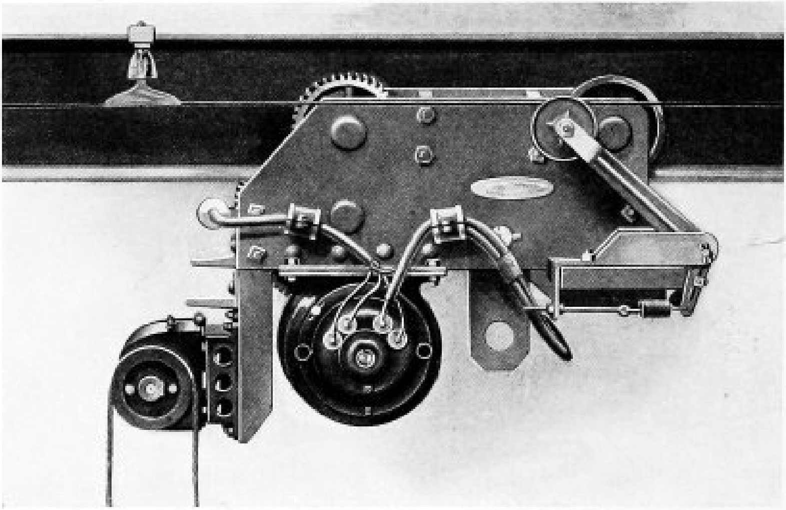
## Brown Steel Trolleys for Electric Hoists

The following prices include current collectors. These trolleys may be widened for I-Beams of larger size without extra charge.

| Capacity in Tons | Size of I-Beam | Minimum Radius Curve | Plain Trolleys | | | Hand-Geared Trolleys | | |
|---|---|---|---|---|---|---|---|---|
| | | | Weight | Head Room* | Price | Weight | HeadRoom* | Price |
| 1 | 6 | 21 in. | 60 lbs. | 5 13/16 in. | $ 35.00 | 100 lbs. | 6 1/16 in. | $ 65.00 |
| 2 | 8 | 36 " | 125 " | 7 3/16 " | 50.00 | 175 " | 7 1/4 " | 75.00 |
| 3 | 9 | 42 " | 150 " | 8 1/16 " | 60.00 | 190 " | 7 1/4 " | 80.00 |
| 4 | 10 | 48 " | 230 " | 8 1/8 " | 70.00 | 360 " | 9 1/8 " | 110.00 |
| 5 | 12 | 54 " | 280 " | 8 3/8 " | 90.00 | 390 " | 10 " | 120.00 |
| 6 | 15 | 66 " | 550 " | 10 3/8 " | 130.00 | 650 " | 12 1/4 " | 170.00 |
| 8 | 20 | 66 " | 550 " | 10 5/8 " | 150.00 | 650 " | 12 5/8 " | 180.00 |
| 10 | 24 | 66 " | 550 " | 10 15/16 " | 160.00 | 695 " | 12 7/8 " | 200.00 |
| 12 | 24 | 96 " | 1550 " | 11 " | 260.00 | 1650 " | 12 3/4 " | 380.00 |
| 15 | 24 | 96 " | 1550 " | 12 3/4 " | 300.00 | 1650 " | 12 3/4 " | 400.00 |
| 20 | 24 | 96 " | 2800 " | 14 " | 350.00 | 3000 " | 14 " | 480.00 |
| 20† | 20 | 66 " | 3900 " | 14 " | 450.00 | 4100 " | 17 " | 520.00 |
| 30† | 20 | 96 " | 4000 " | 14 " | 800.00 | 4100 " | 17 " | 980.00 |

*Dimensions from under side of I-Beam track to bearing point in trolley eye from 1 to 10 tons capacity; for 12 to 30 tons capacity track to centre of hole in trolley clevis where hoist attaches.

†Tandem type with eight wheels. For trolleys without current collectors see pages 26 to 32.



# Motor Driven Trolleys

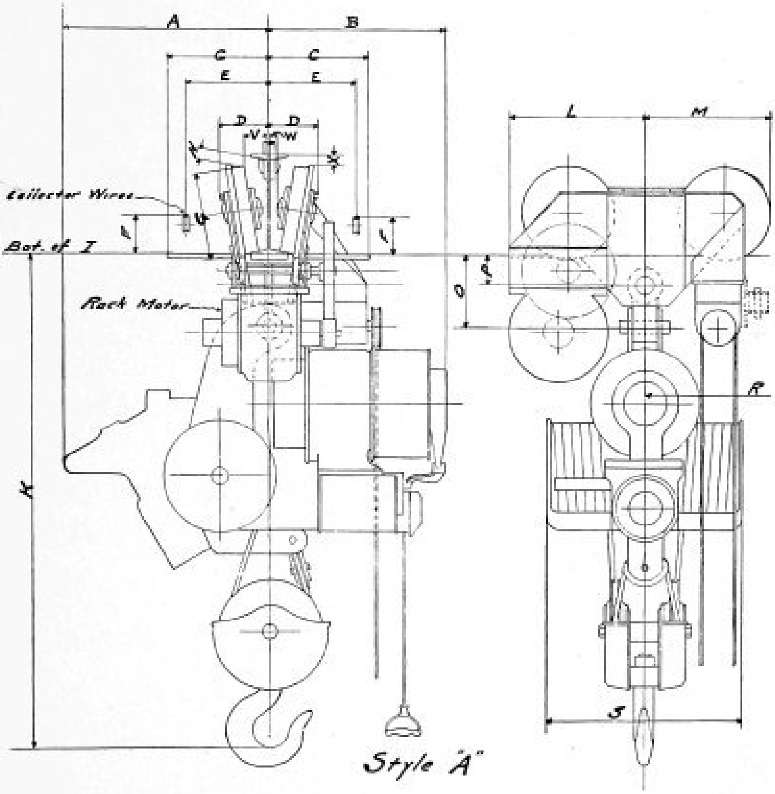
These trolleys have regular Crane Motors geared to the wheels and travel at a speed, under full load, of 350′ per minute. They are controlled from the floor by pendant cords or from an operator's cage, attached to the Trolley, as given on page 68.

Where electric hoisting and electric traveling are both required, these Trolleys are used with hooked in or built in Electric Hoists. This equipment may be used on Trolley tracks or on the bridges of Travelling Cranes.

Each Trolley Wheel has a fixed axle, running in a self-adjusting bronze bearing, at each end of the axle. This insures long life and smooth and easy running. Current collectors are attached to the Trolley to make contact with the Trolley wires, or with metal conductor bars insulated to the I-Beam Track.

| Capacity in Tons | Size of I-Beam | Weight in Pounds | Price | Capacity in Tons | Size of I-Beam | Weight in Pounds | Price |
|---|---|---|---|---|---|---|---|
| 1 | 8 in. | 600 | $500.00 | 10 | 20 in. | 1380 | $ 975.00 |
| 2 | 8 " | 650 | 500.00 | 12 | 20 " | 1810 | 1250.00 |
| 3 | 10 " | 850 | 600.00 | 15 | 20 " | 1810 | 1250.00 |
| 4 | 10 " | 850 | 600.00 | 20 | 24 " | 2560 | 1600.00 |
| 5 | 15 " | 1050 | 750.00 | * Tandem Type Trolleys | | | |
| 6 | 15 " | 1050 | 750.00 | 20 | 20 in. | 3315 | 2100.00 |
| 8 | 20 " | 1380 | 950.00 | 30 | 20 " | 4470 | 2850.00 |

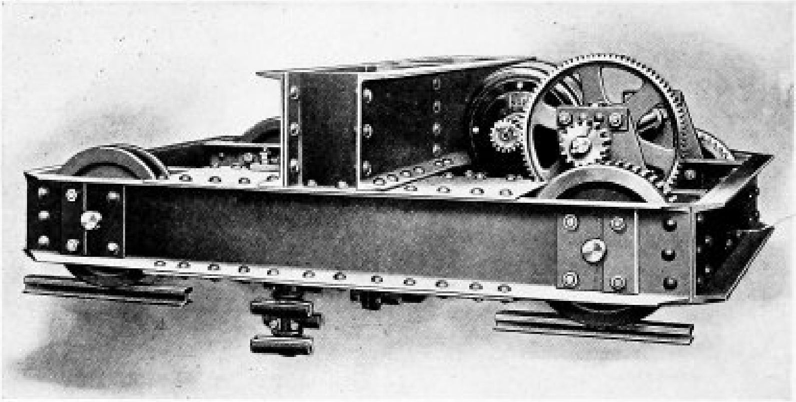
*The tandem type comprises two trolleys, connected end to end, distributing the weight among eight trolley wheels and over a greater length of track. Two motors are used for the drive.



Style "A"

| Capacity in Tons | Minimum Radius Curve | Dimensions in Inches | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | G | K | L | M | O | V | W | X |
| 1 . . . . . . | 10 ft. | 21 | 19 | 12 | 5¼ | 7 | 42 | 19 | 12 | 6 | 2 | ⅜ | ½ |
| 2 . . . . . . | 10 " | 21 | 19 | 12 | 5¼ | 7 | 42 | 19 | 12 | 6 | 2 | ⅜ | ½ |
| 3 . . . . . . | 12 " | 19 | 18 | 13 | 6⅝ | 9 | 49 | 24 | 13 | 4 | 2 7/16 | 9/16 | ⅜ |
| 4 . . . . . . | 12 " | 19 | 18 | 13 | 6⅝ | 9 | 49 | 24 | 13 | 4 | 2 7/16 | 9/16 | ⅜ |
| 5 . . . . . . | 12 " | 31 | 28 | 13 | 8 | 13 | 57 | 24 | 18 | 5 | 3⅜ | 13/16 | 1 5/16 |
| 6 . . . . . . | 12 " | 20 | 19 | 13 | 8 | 13 | 60 | 24 | 18 | 5 | 3⅜ | 13/16 | 1 5/16 |
| 8 . . . . . . | 15 " | 31 | 28 | 13 | 8⅜ | 13 | 63 | 21 | 20 | 11 | 3¼ | . . | 6¼ |
| 10 . . . . . . | 15 " | 31 | 28 | 13 | 8⅜ | 13 | 78 | 21 | 20 | 11 | 3¼ | . . | 6¼ |
| 12 . . . . . . | 15 " | 20 | 19 | . . | 9¾ | 18 | 78 | 23 | 23 | 13 | 3⅞ | . . | 1⅛ |
| 15 . . . . . . | 15 " | 31 | 28 | . . | 9¾ | 18 | 96 | 23 | 23 | 13 | 3⅞ | . . | 1⅛ |
| 20 . . . . . . | 18 " | 31 | 28 | . . | 10¼ | 18 | 86 | 24 | 24 | 14 | 4 | . . | 5 |
| *20 . . . . . . | 15 " | 31 | 28 | 13 | 8⅜ | 13 | 86 | 42 | 42 | 15 | 3¼ | . . | 6¼ |
| *30 . . . . . . | 15 " | 31 | 28 | . . | 9¾ | 18 | 112 | 47 | 47 | 17 | 3⅞ | . . | 1⅛ |

*Tandem type.



## Crane Trolleys for use with Electric Hoists

**To run on top of two Parallel Tracks. Hand-Geared—Motor Driven**

These Trolleys run on Traveling Crane bridges and overhead tramways, consisting of two girders, with or without "T" Rails on top. With the hand-geared trolley one man will move a 10 ton load 50 feet per minute by pulling 30 pounds on the hand chain.

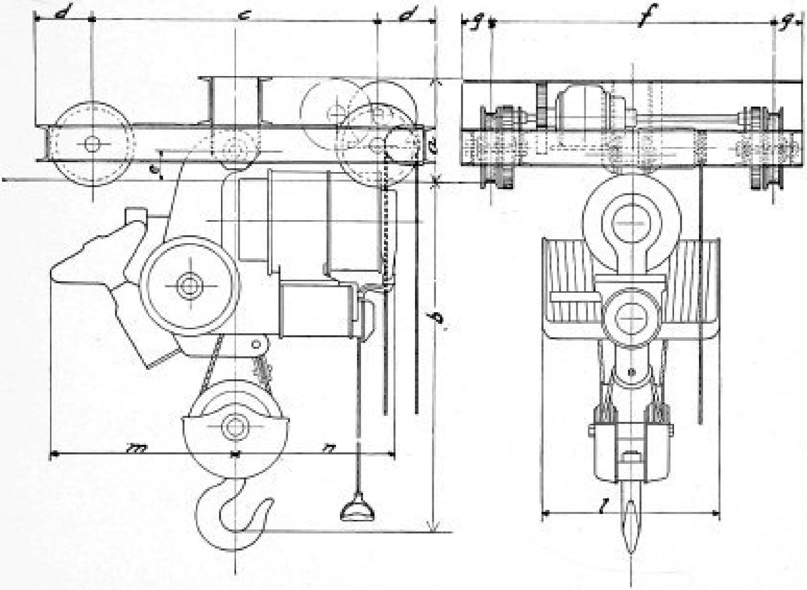
The Motor Driven Trolleys travel 125 feet per minute with full load on the 1 to 15 ton sizes and 100 feet per minute with full load for the 20 and 30 ton sizes.

| Capacity in Tons | Hand Geared | | Motor Driven | |
|---|---|---|---|---|
| | Weight | Price* | Weight | Price* |
| 1 | 725 lbs. | $230.00 | 940 lbs. | $450.00 |
| 2 | 725 " | 240.00 | 940 " | 450.00 |
| 3 | 1000 " | 255.00 | 1275 " | 550.00 |
| 4 | 1000 " | 275.00 | 1275 " | 550.00 |
| 5 | 1000 " | 285.00 | 1275 " | 600.00 |
| 6 | 1214 " | 300.00 | 1600 " | 600.00 |
| 8 | 1214 " | 320.00 | 1600 " | 675.00 |
| 10 | 1250 " | 340.00 | 1600 " | 700.00 |
| 12 | 1646 " | 390.00 | 2090 " | 800.00 |
| 15 | 1650 " | 420.00 | 2090 " | 850.00 |
| 20 | 2000 " | 460.00 | 2410 " | 950.00 |
| 30 | 2250 " | 530.00 | 2920 " | 1100.00 |

*For Trolley only. Hoist is extra.

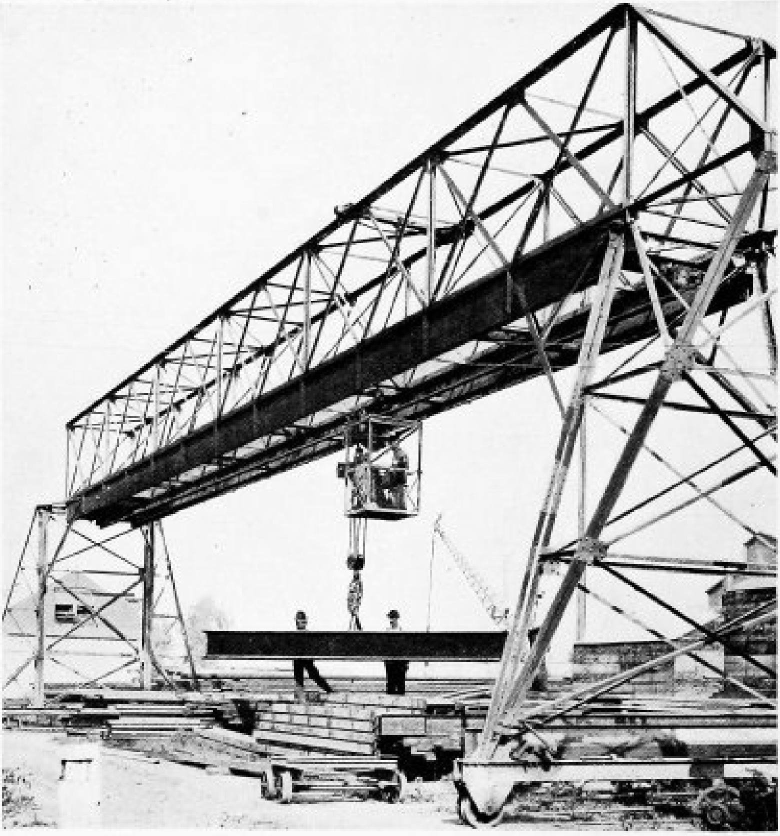
These Trolleys are constructed throughout of steel and the wheels are large in size, with special self-adjusting bronze bearings.

The Electric Hoists may be built in or hooked in these Trolleys. The prices given are for the Trolleys only.



| Capacity in Tons | Size of "T" Rail | Diameter of Truck Wheels | Speed of Power Trolley * | Pull to Move Geared Trolley * | Dimensions in Inches* | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | A | B | C | D | E | F | G* |
| 1 | 2⅜ in. | 10 in. | 125 ft. p. m. | 10 lbs. | 16 | 32 | 39 | 9 | 4½ | 39 | 4½ |
| 2 | 2⅜ " | 10 " | 125 " " | 17 " | 16 | 32 | 39 | 9 | 4½ | 39 | 4½ |
| 3 | 2⅜ " | 12 " | 125 " " | 18 " | 20 | 42 | 48 | 10 | 3 | 48 | 5 |
| 4 | 2⅜ " | 12 " | 125 " " | 18 " | 20 | 42 | 48 | 10 | 3 | 48 | 5 |
| 5 | 2⅝ " | 12 " | 125 " " | 20 " | 20 | 49 | 48 | 10 | 3 | 48 | 5 |
| 6 | 2¾ " | 12 " | 125 " " | 24 " | 22 | 53 | 48 | 12 | 2 | 48 | 5½ |
| 8 | 2¾ " | 12 " | 125 " " | 27 " | 22 | 50 | 48 | 12 | 2 | 48 | 5½ |
| 10 | 2¾ " | 12 " | 125 " " | 32 " | 22 | 63 | 48 | 12 | 4 | 48 | 5½ |
| 12 | 3⅛ " | 14 " | 125 " " | 37 " | 26 | 59 | 48 | 12 | 6½ | 48 | 6 |
| 15 | 3⅛ " | 14 " | 125 " " | 46 " | 26 | 77 | 48 | 12 | 6½ | 48 | 6 |
| 20 | 3⅛ " | 16 " | 100 " " | 62 " | 28 | 65 | 48 | 13 | 7 | 48 | 6½ |
| 30 | . . . | 16 " | 100 " " | . . . | 29 | 88 | 48 | 13 | 7 | 48 | 6½ |

*These cover both motor drive and hand geared except that the hand gear wheel projects out to one side 7¾ inches greater than dimension G.



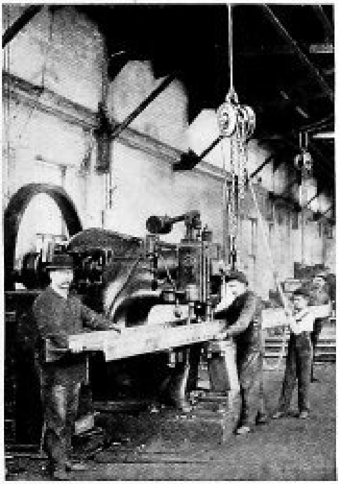
## Operator's Cage

This illustration shows an operator's trailer cage attached to a Motor Driven Trolley and Electric Hoist. This enables the operator to ride with the load across the Crane bridge, or along an overhead Trolley System. It is attached by a flexible connection to the Trolley, so that the equipment will round a short radius Curve and is also easily detached when it is required to use the Trolley and Hoist for controlling from the floor by pendant cords.

The cage is so constructed that the operator's view of the load is unobstructed. It may be thoroughly enclosed when required to protect the operator from the weather.

This trailer cage is supplied with the trolley at an extra price of $175.00.

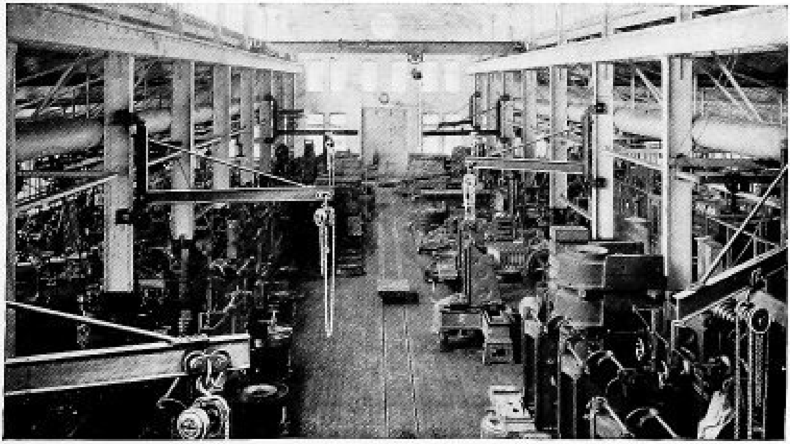
# A few places where Yale & Towne Chain Blocks are used



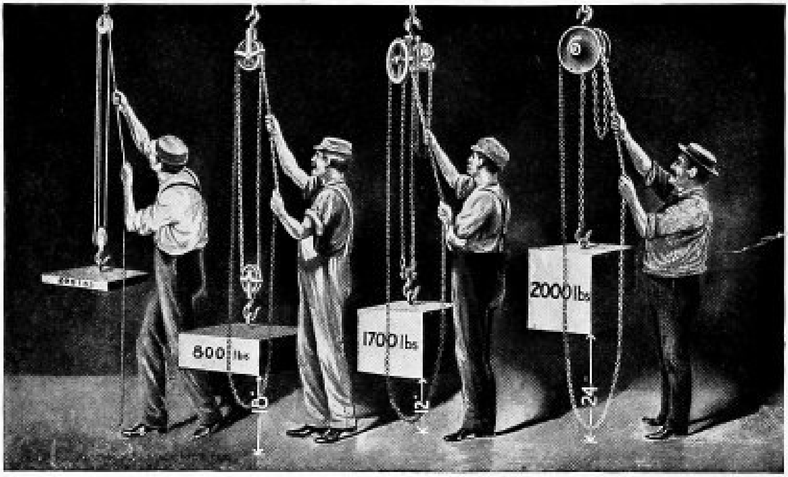
Yale & Towne Triplex Blocks on overhead carrier system for handling and conveying structural steel.

YALE & Towne Chain Blocks are utilized by the hundreds in machine shops, power plants, engine rooms and all kinds of factories. They are used for setting machinery, lifting parts thereof for inspection or repair, or serving machines. They handle bales of hay or cotton, logs, cases or tubing; lay waterpipe, gas mains or assist in the construction of sewers. In fact wherever lifting is to be done, one of the three types of Yale & Towne Chain Blocks may be used with a pronounced saving of time, hard work and money. Truckmen use them for handling safes, boilers, stone, street car rails, horses or other heavy objects. Railroad shops are full of them; they lift ammunition, etc., in forts and battleships; they are used to handle automobiles, motor boats and theatre scenery. They are used in gas and brick works, and for setting monuments; also in abattoirs, on docks, in warehouses and on the farm.

There is no locality where Yale & Towne Chain Blocks and Electric Hoists cannot be sold



A Thoroughly Modern Shop



# Choosing a Hoist

**Equal Work for Half-a-Minute**

YOU want value for your money. Then before buying be sure you understand what you will get for it. The picture shows the relative weight and height one man can lift in half a minute with a one-ton block of the several types.

To lift one ton one foot with the
DIFFERENTIAL, 3 men pull 216 lbs. overhauling 30 feet of chain.
DUPLEX, 1 man pulls 87 lbs. overhauling 59 feet of chain.
TRIPLEX, 1 man pulls 82 lbs. overhauling 31 feet of chain.

When Time and Labor cost money the Triplex or the Y. & T. Electric is the cheapest block to buy.

The Differential Block, owing to the endless travel of the chain under the load, always requires excellent workmanship in chain and sheaves to make it durable and satisfactory. Triplex and Duplex Blocks are far more durable than the Differential type.

The comparison of power and speed (as shown in the picture and as tabulated above) will enable any one to select the hoist which will be most suitable for his use.

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# YALE & TOWNE

## CHAIN BLOCKS
## ELECTRIC HOISTS
## TROLLEYS
## AND
## CRANES